

Green Creep--

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of the putting or teeing surface can help retain the original outline shape and surface can help retain the original outline shape and surface area.

Fairway mowing patterns and fairway outline shapes often have crept over time. New machinery at least can provide visually attractive patterns even if the width or outline shape of the fairway has changed over the years. Fairways often become narrower. Rough areas tend to creep inward as well, partially due to inadequate maintenance staff. Recontouring and expanding fairway and maintained rough areas can help compensate for increased tree growth and more senior players. Longer hitters often will benefit from expanded fairway widths since length and accuracy are not synonymous and speed of play is always a factor. Increasing the area of semi-rough or more or less maintained rough only toughens any course. In today's economy, most courses seek rapid play as an economic necessity. Deep and thick roughs are counter productive. Introducing new mowing patterns can add eye appeal and make even flat fairways look better.

Evolution alters the turfgrass, too. As long as it is green suits some, however, what was originally a lush homogeneous blend or single variety has become infested with *Poa annua*, weedy broadleaf species, common bermudagrass or worse in fairways and maintained roughs as well as putting surfaces and tee tops. Seedbed improvements and replanting may be the remedy. The introduction of new turfgrass varieties by overseeding will help improve playing conditions and appearance.

Bunker creep and technology have overtaken the irrigation system too. A new, more versatile and efficient pumping plant may be necessary. Upgrading the irrigation system controls to computer operation may save labor, improve turf quality and help conserve water and electricity. Reshaping of greensites, or repositioning of fairway bunkers, can also require sprinkler head replacement, repositioning or the addition of heads to assure uniform coverage. Recent improvements in sprinkler head operation, water distribution and water efficiency may encourage sprinkler head replacement. Adapting to the use of sewage effluent irrigation water may be a necessity of the times in some areas. Adding additional irrigation water storage lakes may be desirable and can be an aesthetic and strategic enhancement as well.

Green creep also impacts water storage lakes and ornamental lakes, ponds and streams. Water vegetation can expand in number and begin filling the lake. Grass from the edges can grow into the water over time reducing surface area. Excessive algae growth can clog a pond or lake over a few years with unrestrained growth. Uncontrolled lake edge waterweed growth can obscure ornamental walls. Irrigation storage capacity or flood control capacity may be reduced.

Time and increasing golfer traffic adversely change soil

structures. Fairways once mostly dry can evolve into, at first, small muddy spots. As rainfall and pedestrian, cart and maintenance traffic continue, the compacted and wet or muddy and degraded areas can migrate and spread like a cancer. Turf deterioration follows. Adding subsurface drainage or even sand capping fairways may be necessary to expand playing opportunities during wet weather. Putting surfaces can become wet sponges or brick-hard when the seedbed has deteriorated due to compaction. Tee tops are one of the first areas to demonstrate the impact of compaction on turfgrass quality.

The addition of golf cart pathways or the extension of existing paths often becomes necessary as the volume of play increases. Replacing fairway cart traffic onto cart paths will help combat fairway compaction and seedbed deterioration. Adding expanded "lay-by" cart parking positions can ease congestion near greens and tees. Adding curbing can help control wayward drivers. Repositioning some cart paths can improve utilization and even help speed up play. Converting from gravel or dirt to concrete or asphalt will help improve maintenance and enhance the visual elements. Cart traffic always will cause compaction when not on a path.

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Few old and older courses are today as they were when they first opened. Noted examples, such as Augusta National, Pine Valley and Pebble Beach, bear little resemblance to their early years of operation, even though current owners or members believe they are holders of the original design or original product. Some changes are committee induced, not green creep, however, and still result in substantial alteration from the original design.

Green creep makes courses more homogeneous, more similar in visual and playing appearance and certainly decreases the playing challenge of the original design. Few professional golf architects of the last half of the 20th Century would have designed every green round, every fairway flat and every bunker in the image of a peanut.

"To do nothing, and continue with the status quo, is a continuing downward slide. From a competitive viewpoint, the slowly deteriorating course that does nothing in response certainly loses market share to new courses in the area."

"When I am doing bunker and green creep corrections, I feel just like a plastic surgeon. I am doing nip and tuck, wrinkle removal, a little middle-age facelift and enhancement, a few hair grafts. Pouty lips on a bunker are preferable to thin ones. Our work also involves some liposuction, taking the excess accumulated fat out of a mature golf course," comments Fream.

Correcting green creep really becomes a remodeling and modernization program, even if some effort is devoted to recapturing a long lost glory. Modern volumes of play, enhanced expectations for turfgrass quality, a focus on visual dynamics and who has the toughest course will influence some remodeling efforts. Remodeling to a budget, to meet user market green fees or membership capability is certainly feasible. Revitalizing an older course to join today's standards and meet today's expectations while accommodating more play is attainable and can occur in an affordable way. Often corrections can involve only mowing pattern changes or bunker edge re-cutting. A comprehensive master plan should guide more involved elaborate directives. The master plan for a hole or a course should be precise and comprehensive. Accurate working drawings should be utilized. Not only golf design, but also ornamental horticulture and turfgrass agronomics are part of the solution. the corrective effort can occur over an extended period of time, be sequential or priority phased or occur quite quickly over an entire course. Bunker edge corrective changes can occur quickly and have a clear obvious and beneficial result.

To do nothing, and continue with the status quo, is a continuing downward slide. From an competitive viewpoint,

the slowly deteriorating course that does nothing in response certainly loses market share to new courses in the area. Golfers today are highly attuned to the visually dynamic style of golf. Countering years of evolutionary changes will have direct and positive economic benefit. To see the problem, to understand there is a problem, is not for everyone to do. Being too close, being there too long, being too new to the situation and not being attuned to the action shields the viewer from the knowledge of what had been and often also what can be. An impartial, experienced eye brings great value.

Much of this article's focus is on easy to implement, relatively inexpensive actions to reclaim what once was there. This must not be confused with the more extensive makeover or upgrade and repositioning that can be very elaborate, involved, costly and very beneficial. An assessment of existing playing conditions, the members' desires, analysis of current market competition, user demographics, operational goals, economics, agronomics, local competition and other factors become part of any renovation or modernization program. The restoration or modernization program must be carefully planned and correctly implemented. The results can be spectacular, the cost of implementation need not be excessive. Green creep is here to stay and we must deal with it, sooner or later.

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When something goes wrong with your automobile, you drive it to the garage. When you have an ailment or injury, you go to the doctor. Athletes have coaches. Where do you go when you need to diagnose your own job performance?

Bosses and managers do not have lots of time to put their own priorities on hold to tend specifically to yours. Also, many bosses and managers are hesitant to criticize if they're already happy with your present employment performance.

But, fine-tuning might be what you need to succeed and reach your goals. You are unequivocally responsible for boosting your job performance and marketability.

Ask yourself these four important questions. Respond to them as if you were deciding whether to write your own paycheck.

How much is your performance worth? This is the bottom line. If you can say that you've provided an increase in productivity, you can assume you are valuable at this point. Look at improvements you've made, relationships you've nurtured, problems you've resolved. List everything you can think of. What achievements have you accomplished?

Have you set solid objectives for yourself? You need a plan of action to examine your work performance: otherwise, you might lose sight of important goals. If you haven't met them, determine why and consider what can be changed to meet them. Strive to make each factor in your plan work.

How do you compare with your fellow workers? Working together demands that you stay focused as a team. But you also need to know if you're a strong player. Determine what your position is among your peers.

Are you more than a manager? Companies invest millions of dollars to produce good corporate leaders. Good workers are hard to find, good leaders even more difficult. How does your path compare with co-

workers. Are you in a position of responsibility? Is there more you're capable of contributing as a leader?

These questions are critical for your occupational progress and growth. Give yourself a quick job check-up using these guidelines. All it takes is a little time and honest answers. Asking yourself a few simple questions can keep you in tip-top employment health!

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Happy Holidays



Light Up Your Lot

Landscape Lighting Can Transform the Dark Spots Of Your Property Into Aesthetic Oases.

By KEVIN DALY
Northern Lights Lightscares

Mercury vapor downlights mimic moonlight as its light filters down through the hemlock trees to create a soft light and shadow effect along the drive.

Moonlight falls gracefully on the lawn and gardens that surround the silhouette of a stately oak. Overhead, the illuminated branches of the oak and other nearby trees form a spectacular canopy. A warm breeze rustles through the leaves while shadows dance on the carefully groomed lawn.

Although romanticized advertising that conjures up romantic images like these may get carried away, it is fair to say that landscape lighting can enhance a property's appeal. Consider the yard an extension of the house. How much time would anyone spend at night in a room with no lighting?

Landscape features taken for granted in the daytime are more interesting at night with the play of light and shadow. The lighting evolves with the changing of the seasons and is different each night.

Lighting is an art; if it weren't, electricians would design all the lighting. But you shouldn't approach landscape lighting with your head in the clouds. Imagination and flowery linguistics take you just so far. Designers need to spend time in the field-day and night and shouldn't be afraid to get their hands dirty.

Good designs result from experience, technical knowledge, a good eye for aesthetics, perseverance and good listening skills especially when the client is speaking. At its worst, designing landscape lighting is a frustrating, but rewarding job. At its best it is pure theatre in the back yard.

More Than Path Lights

What do we mean by landscape lighting? Do a dozen lights along a pathway constitute landscape lighting? Absolutely, but lighting pathways is just one facet. The designer must select for illumination those elements of the landscape that will create an aesthetically pleasing nighttime environment. These elements may include trees, shrubs, lawn, rock formations, hardscape, outdoor sculpture and architectural features.

Commercial and public areas involve greater light levels for function, safety, security and promotion they want to be seen. Residential properties are usually illuminated more subtly. Commercial lighting requires large, tamper-proof

fixtures with longer lamp life to reduce maintenance, while residential fixtures are small and decorative.

Landscape lighting is expensive. The price should reflect costs associated with trenching and burying electrical wire, electrician's fees, fixtures and design. So don't develop an extensive plan if you have a budget for only one or two lights.

Develop a design that reflects the client's tastes and expectations. Many times a client will have an "I'll know if I like it when I see it" mentality. If the property is one with little lighting potential, you may be better off without the job.

Designing involves more than visiting the property and creating a plan. You should look at the property at night. Once the design is on paper, make sure that the installation crew thoroughly understands the plan.

Once you complete the job, walk the client through the lighting and have him or her evaluate the design. Re-lamping or re-aiming a fixture is an easy and inexpensive adjustment. Having to run new electrical lines is another matter.

What It Costs

Homeowners generally will feel comfortable spending about 1 percent of their home's value on landscape lighting. It's unrealistic to expect a homeowner to spend more on landscape lighting than they have spent on landscape plants.

Designs with a turnkey price of up to \$5,000 will usually have low-voltage lights because of the savings on electrical and fixture costs. Designs that cost between \$5,000 and \$15,000 can utilize line voltage including H.I.D. (High Intensity Discharge) fixtures to create a range of dramatic lighting effects. But don't make frivolous choices that spend lots of money for small results, such as running power down a 500-foot drive for two 50-watt pier lights. Of course, if it's important to the client, then do it.

Until recently, million-dollar homes and estates have been the primary market for landscape lighting. These homes are usually on large lots and often secluded from any neighborhood or street lighting. They use lighting to address issues of security, safety and function. H.I.D. lighting is usually the most effective on properties with stately trees and sweeping lawns.

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Light Up Your Lot--

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Where To Begin?

The first step in a design is called the "discovery." Visit the property before discussing it too much with the clients so that you don't suggest anything that may not be workable on their property. Even the most general survey of a property will tell you what is feasible.

Determine your client's expectations. Ask questions. Have they seen lighting they like? Have you shown them something you've done? Are they interested in security as well as aesthetics? What are they accustomed to?

Start from the place where your client will spend the most time viewing the lighting. This could be a terrace, a pool area, the drive or the front door.

Develop a sense of where you are going with the design. The approach may not be apparent at first. Spend time on a property to get a feel for it. A walk through the property can provide thoughts about the best opportunities for lighting and areas that might present problems.

Determine the primary viewing angles. Some plants are seen from many viewing angles, such as in a circular drive. Plants seen from multiple angles usually require putting

fixtures below grade to avoid glare.

Choose the property's most outstanding features and its limitations. If it has many rock outcroppings, for example, you could use them as a motif for the design. If there are lots of tall oak trees, you need to decide if they are best suited for up-lighting, moonlighting or both.

Deciding What to Light

If You Can't See It, Don't Light It. It's That Simple.

When you stand at the front door, what are the primary features that you see? Perhaps it's a sugar maple in the front lawn, a planting, a rock ledge or a pond. Make sure you address it in your plan.

It's a good idea to see a property at night. Often there's a streetlight that you didn't see or a 200-watt porch lamp that looked quite unassuming during the day.

You also must decide how much to light. If your clients have lived in the city most of their lives and find the darkness of the country a little scary, they may be better off with more lighting.

Designs for all seasons

On a 90-degree day in July it's difficult to imagine what a property looks like in January. But your design must take this into account unless your client is at the property during

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only one season of the year.

Incandescent lighting is fairly forgiving to the change of seasons. Its warmer tone looks fine on most tree bark. Metal halide and mercury vapor are whiter light sources and can create "hot-spots" on trunks and branches. This gives the design an amateurish look. There are several ways to overcome this.

Use lamps with lower lumens when designing in the summer so the winter effect is not overbearing. Use recesses in the lawn so the fixture is moved away from the tree trunk. Narrower beams are effective in reducing trunk glare. But this depends on the height and width of the tree canopy. Another effective means of reducing hot spots is to mount fixtures on the back side of the trunk (as viewed from the primary viewing angle). This has a dramatic effect because it highlights the form of the tree in silhouette. However, this only works when there is one viewing angle.

One pitfall to designing in winter is not doing enough pruning to allow the light to get through. A small twig near a lamp may look insignificant in the winter, but may completely block the light source in the summer.

Installation and Maintenance Issues

Avoid damaging a tree by mounting fixtures properly. Put them on a stand-off, which allows the tree at least 1 to 2 1/2 inches of growth before the tree will begin to make contact with the base of the fixture. It is usually best to staple wire to the trees with a notched staple gun using round wire. Flat wire has more surface area in contact with the bark and is more likely to grow into the tree. Stapling should be spread as wide as practical. This will enable the tree to push the wire off over time, which is much preferred to having it grow into the tree.

Do landscape lights cause trees to bloom early in spring? Do the lights fool the trees into thinking it is daylight at night? No. If this were the case there would be a lot of early blooms and probably plenty of dead trees next to street-lights.

Lighting Techniques

A landscape design may include several types of lighting:

* Downlighting: mounting a fixture in a tree and pointing it toward the ground.

* Moonlighting: downlighting that tree-climbers mount high in trees. The light is shielded and directed down through the branches of the tree so that shadow patterns are cast on the ground. The look simulates moonlight. Mercury vapor lamps usually are used for this because of their cool color and great dispersion.

* Uplighting: mounting a fixture at the base of a tree and directing the light

through the tree's branches to illuminate the canopy. The fixture may be mounted on the trunk of the tree, on a limb, on the ground or recessed into the ground. You may need more than one fixture to illuminate the entire canopy, especially with a large tree. It's often better not to light the entire tree. Mount the fixture in such a way that there is no hot spot on the trunk.

Consider a plant's leaves when uplighting or downlighting. Not all plants have leaves that light equally well from above as they do from below. For example, silver maples light poorly from below because the undersides of the leaves look a milkish white.

Some trees are too big for uplighting, especially in heavily wooded areas where the tree has no branches on the main trunk for 40 feet or more. You can uplight these trees, but you need to determine if there is a view to the canopy. The viewing position must be far enough away so that viewers will actually see the canopy without craning their necks.

Here are a few other lighting effects you may wish to employ:

* Backlighting: lighting the background behind a tree or plant so that the tree appears in silhouette.

* Underwater lighting: used primarily in waterfalls and fountains. The light dances back and forth on the waterfall with the movement of the water.

* Mirror lighting: lighting a subject on the side opposite the viewing angle to create a mirrored reflection in water.

* Cross lighting: used on sculpture to create a sense of depth by having two lights, one placed on each side of the object.

* Vista lighting: creating a view in the distance, which pushes back the wall of darkness and creates a sense of depth. Don't light anything in the line of sight of this view that would distract the eye from the focal point in the distance.

* Grazing: placing the light source close to a surface with a lot of texture. This emphasizes the texture through dramatic shadows that reveal its unevenness. Grazing is used frequently on stonework.

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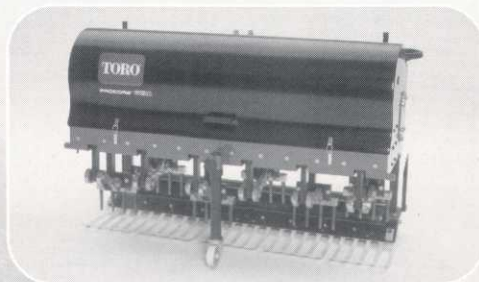
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