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Going Green with Solar Panels

Solar energy options today are capable of meeting electrical needs for golf course maintenance facilities and can pay for themselves over time.

by Andrew J. Jorgensen, golf course superintendent, On Top of the World Communities, Inc.



Solar panels installed atop the roof of the turf care facility at Candler Hills Golf Club in Ocala, Florida, meet all electrical needs.

In 2011, a solar system comprised of 297 photovoltaic panels was constructed atop the maintenance facility at Candler Hills Golf Club. Photovoltaics are a method of generating electrical power by capturing solar radiation and converting it into usable energy. For our system, inverters are used to convert direct current (DC) solar energy captured from panels on the roof into alternating current (AC) electricity that can be used to power building utilities and equipment and charge batteries.

For obvious reasons, renewable energy continues to warrant significant attention and demand in nearly every industry today. Fortunately, as technology continues to improve and greater efficiencies in real-world scenarios are achieved, solar systems are becoming more practical than ever before. In this case study, the method of capturing solar energy for conversion into usable electricity is being utilized with great success at Candler Hills Golf Club in Ocala, Florida.

Read the rest of this article

Don't Guess -- Check the Numbers!

Go by the numbers to remove quesswork when it comes to topdressing and core aeration

by **Bob Brame**, director, North-Central Region

Golf turf professionals understand the importance of putting green topdressing and core aeration operations, but a lack of information, combined with golf facility politics, can compromise what is actually accomplished. Often the leadership of a facility underestimates the importance of aeration and topdressing programs. Since these programs are critical to the performance of the greens, it is vital that the superintendent does a good job of communicating the need for these admittedly disruptive practices. Physical soil testing can provide scientific evidence of the need to continually cultivate the rootzone and provide a means of measuring the impact of such

While physical soil tests provide a wealth of complex information, focusing on porosity will help the superintendent explain to the layperson the need for cultivation. A soil profile is comprised of solids and the spaces between the solids pores. Ideally, there should be a nearly even split between the Soil layering within the upper rootzone is indicative of two categories - 50 percent solids and 50 percent pore space. The solids will be a combination of clay, silt, sand, gravel, and organic matter. Pore spaces will be filled with either air or water. Large pores are where water, oxygen, and roots freely move. Smaller pores, commonly known as capillary pores,



topdressing being out of sync with putting green aging and turf growth. Punching through the layers with core aeration and backfilling the holes with sand helps to increase the percentage of air-filled pore spaces.

hold water. A rootzone with about 25 percent air-filled pores and 25 percent water-filled pores provides a great growing environment for turfgrass plants. The actual makeup of each category will directly impact how water moves through and is retained in the rootzone. This in turn has a tremendous impact on the health and quality of the green. To quantify the amount of solids and pore space in your greens, simply submit an undisturbed column of the soil profile to an accredited physical soil testing laboratory for physical analysis. A complete list of accredited physical soil testing can be found on the website of the American Association of Laboratory Accreditation.

Read the rest of this article.

Food for Golf

Locally grown takes on a new meaning at several golf courses where gardens have become a means to provide home-grown produce.

by Jim Skorulski, Derf Soller, Pat Gross, David Oatis, Bud White and Stan Zontek.

More people are finding satisfaction in raising their own vegetables or at least purchasing locally grown, fresh inseason produce. The taste of fresh home-grown vegetables is matched only by the sense of accomplishment that a successful harvest brings. The growth in farmers markets and Community Sponsored Agriculture (CSA) programs across the country attests to the public's desire for fresh food and their concern for where and how their food is produced. This attitude has taken hold at several golf courses as a result of some individuals who share their passion for gardening and love of fresh food. This article provides a story of how individuals at three



Early plantings are taking hold at Ridgewood CC. Raised beds are used because they keep the soils well aerated and offer an opportunity to plant at higher densities to maximize space. Raised beds also make it easy to heavily amend soils with compost.

golf courses in Connecticut, New Jersey, and Virginia have developed productive organic gardens that provide fresh fruits and vegetables along with other interesting by-products.

Read the rest of the article

Watch the video

Regional Updates

The USGA Green Section agronomists see an amazing variety of issues and challenges as they visit golf courses across the country. Be sure to read the highlights of each region since many of the topics covered apply to courses everywhere.



Mid-Atlantic Region

This update includes:

The importance of irrigation head maintenance, sharp reels and an update on insect activity.

View the rest of this update



This update includes:

"Ready, Set, Grow", bentgrass holding its own and educational opportunities.

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This update includes:

"Brown - Good or Bad" and comments on bacterial decline complex.

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Northeast Region

This update includes:

The comparison of a marathon with the maintenance of greens in the summer.

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Mid-Continent Region

This update includes:

The continuing drought, the necessity for water conservation and the impact on playing quality.

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Florida Region

This update includes:

Overseeding transition problems, persistent nematode activity and disease diagnosis.

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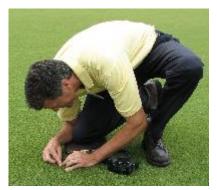
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