

SAVE 25% or more on your Topdressing time and labor Cost Guaranteed...Contact Your Local Dealer for A FREE Demo Today.

NE OH / NW PA / N WV SHEARER GOLF 855-GOLF-909 www.ShearerEquipment.com

NJ / NYC / NY LONG ISLAND **STORR TRACTOR COMPANY** 908-722-9830

www.storrtractor.com

ILLINOIS, INDIANA, MICHIGAN, WISCONSIN J.W. TURF, INC. 888-959-8873 www.jwturf.com

SC/NC/TN/GA/AL/MS **GREENVILLE TURF & TRACTOR** 800-485-8873

www.greenvilleturf.com

SE.FL / HILTON HEAD / CARIBBEAN **EVERGLADES EQUIPMENT GROUP** 888-746-8873

www.evergladesequipmentgroup.com

CALIFORNIA TORRENCE'S FARM IMPLEMENT 760-398-4141 www.torrences.net

MID ATLANTIC AND NEW ENGLAND FINCH SERVICES, INC. 800-560-3373 www





ENVIRONMENTALLY FRIENDLY FAST INSTALLATION NO SUB BASE NEEDED

by Porous Pave



& Cart Path Surfacing



PERMEABLE DURABLE & FLEXIBLE

NO SEAMS









MANUFACTURED BY POROUS PAVE, INC. www.porouspaveinc.com • 888-448-3873 • 4385 E. 110th St., Grant MI 49327











2014 Agrimetal W-24
Walking overseeder w/ trailer
\$5500



2011 Jacobsen LF-570 11-blade reels; ROPS; 1458 hours \$19,500



2013 John Deere Precision Cut 7500 4WD;7-blade QA5 reels; rear roller brushes; ROPS; Canopy; grass catchers 1220 hours \$20,900



2012 John Deere Precision Cut 8700 4WD; 10-blade QA7 reels; ROPS; canopy 1448 hours \$22,500



2015 Toro Reel Master 5410
11-blade DPA reels; rear roller
brushes; ROPS
1293 hours
\$26,500



2014 Jacobsen GP 400 gas
11-blade reels; rear roller brushes;
ROPS; lights; grass catchers
1151 hours
\$12,500



2014 Toro Greens Master Triflex 3300 gas 11-blade DPA Reels; ROPS; grass catchers 1143 hours \$19,900



2014 Toro GreensPro 1240 526 hours \$8,900



2011 Jacobsen Turfcat 628D 4WD ROPS; 72-inch mulching deck 871 hours \$11,500



2013 Toro Groundsmaster 3500D Sidewinder 3WD; ROPS 895 hours \$26,000



2011 Toro Z-Master 3000 zero turn 20.5 hp Kawasaki gas engine; 48 "deck; ROPS 1214 hours \$3,500



2011 Smithco Spray Star 3180 diesel 300 gallons; Raven Controllers; foam marker 1862 hours \$16,000

Call for more information

*All machines sold reconditioned and covered by our warranty

Phone: (352) 588-3092 Toll-Free: (866) 588-3092 globalturfequipment.com



2013 Toro ProCore

Call for Price (Have 2)



2009 Toro 5210 2WD



Toro 3500D Great Shape!



2012 John Deere 8800 Med. Hours Great unit! \$18,000



2013 Jacobsen GPlex 400 Have 4 Call for Price



2013 Jacobsen LF1880 1400 Hours Have 2 \$13,000 each



2013 Jacobsen LF510 4WD CALL FOR PRICE



Quality Pre-Owned Turf & Grounds Maintenance Equipment

WE TAKE
CARE OF
YOUR NEEDS

866-331-6621

COURSE

TESTED

If you don't see it listed, give us a callwe probably have it!!!!

Miscellaneous Items/CALL for Price

2011 Toro 5040 w/Blade and New Rake Low Hours
Toro Hydroject 3000 \$2000
2012 John Deere TE Great Shape!
Agrimetal BW360 Blower
2011 John Deere TE Gator Electric (Low Hours)
2012 John Deere TE Gator Electric (Low Hours) Accu-Pro
Reel Sharpener Foley United Bedknife Grinder
2012 Toro 5 Gang Great Shape
2010 Jac AR3 1800 Hours \$10,000
Numerous EZ-GO Electric Golf Carts
2010 Toro 3150 3WD 8 Blade
2010 EZ-GO Beverage Cart
Used Core Harvester \$2500 Good Shape

John Deere 8700 Verticuts \$5000

John Deere 8700 or 7700 Reels \$5000

Toro Greens Rollers \$2000

2009 Toro 4000 2200 Hrs \$22,000

2011 John Deere 1200H Trap Rake \$7500

(2) Turfco Blowers \$5500/ea

2012 Toro 3500 Good shape!! \$20,000

(10) 2011 Jacobsen 322 Eclipse Walking Greensmowers

2011 Toro 5800 Sprayer

(10) 2010 Toro Flex 21 Walking Greensmowers
(5) 2011 John Deere 220 Walking Greensmowers w/trailers
(4) 2011 John Deere 260 Walking Greensmowers w/trailers



2006 Foley 670 Bedknife Grinder, 2006 Foley 632 Reel Grinder Set: \$19,000



2013 Cushman Turf Truckster Have 2 1200 Hrs \$14,000/ea



2015 EZ-GO TXT Electric Cart



AgriMetal Wireless Control Blower \$4,500



2010 Toro 3150 11 Blade DPA Heads Low Hours \$16,000



2011 John Deere 8500 4WD, 1800 Hrs \$14,000



2009 Jacobsen AR522 2100 Hours \$16,000

731-247-3264 • futuresgolf@wk.net 1180 Puryear Country Club Rd., Puryear, Tn. 38251



2013 Turfco 1550



2012 Toro 4500 2000hours (Have 2) \$33,000/ea



John Deere 800 Aer-Core Have 2 CALL FOR PRICE



Toro 3100D Sidewinder
(Have 3) Low Hours Starting at \$9,500



2013 Toro HDX-D Truckster



2013 Cushman SprayTec (400 hrs) \$18,000



2013 Jac GMII Front Blade & Rake Have 2 2100 Hrs \$7,500/ea

Providing proven solutions since 1976! Call 877-771-6041



Soilfloc® Sealant stops leaks in ANY earthen pond, lake, canal, tank, and more!

- No need to drain water!
- Easy to apply
- Non toxic, won't harm livestock



In studies of actual turf applications, Soilfloc GC[™] has been shown to increase water efficiency up to 20 percent.

- Reduce water use
- Reduce runoff
- Reduce cost
- Improve turf quality







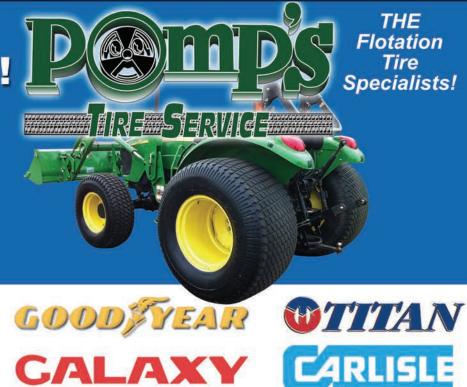


Our large inventory allows us to supply any tire need for any machine or vehicle.

Golf Course Superintendents nationwide have proven that Pomp's Flotation Tires are essential during delicate operations:

• TOP DRESSING • SPRAYING • MOWING • BACK FILLING TRAPS • AERATING

The large contact area of the flotation tire effectively distributes load over a broad area. This produces lower unit ground pressure, resulting in minimized soil compaction. Our custom built wheel and tire combinations will convert your golf course equipment into the most productive tools you will ever own.





1037 W. Broadway

Box 637 Monticello, IN 47960

Phone: 574-583-4136 • Fax: 574-583-7267

Tire Professional
Since 1939

"We know tires... You should know Pomp's"

For further information call our TOLL FREE number today in the US & Canada:

800-348-2396

www.pompstire.com • rzarse@pompstire.com

ORIGINAL EQUIPMENT REPLACEMENT

FLOTATION TIRES • RIMS

• WHEELS • SERVICE

Rims and Wheels: Specially fabricated heavy-gauge rims and wheels are available for custom conversions and original equipment replacement.



Golf Course Trades * Volume 28 Number 5 www.GolfCourseTrades.com

CEO/Founding Publisher: James "Tim" Wilson

Managing Editor: Sharon Scott, RRP; SharonINK@thetrades.com

Sales Manager: Marla Carroll; Marla@thetrades.com

Layout/Design: Ken Rowland; golf@thetrades.com

Online Media: Carrie Vandever;

news@golftrades.com

Editorial Assistant: Abigail Wilson

Send Press Releases: News@GolfTrades.com

Contributing Writers: Linda Parker, Jay Flemma, Jeff Shelley, Andrew Penner, Brian Duffy

Marketing & Sales Office:

20 Our Way Drive, Crossville, TN 38555 phone: 931-484-8819 • fax: 931-484-8825

Marla Carroll; Marla@thetrades.com Connie Madril; Connie@thetrades.com

Media Kit Requests: 931-484-8819;

adrep@thetrades.com Reprints: info@thetrades.com Subscribe: subscribe@thetrades.com

Trades Publishing Company, Inc. PO Box 1364, Crossville, TN 38557

Send your comments, suggestions to golf@thetrades.com.

If you would like to contribute an article, or have a bit of news vou think other superintendents would be interested in please email golf@thetrades.com or news@golftrades.com.

The Golf Course Trades, established 1990, is a supertabloid buyer's guide publication targeted specifically at the golf course superintendent. The Golf Course Trades offers display advertising, a categorized supplier directory, press releases, and extensive product reviews for heavy equipment. GolfCourseTrades.com is an extension of the magazine with a complete supplier guide for everyday use on the course. The Golf Course Trades currently mails to 18,955 golf course superintendents and product vendors in the United States. A digital copy of the publication is online as well at GolfCourseTrades.com.

Copyright © 2018 The Golf Course Trades

contents



features

Mechanical Aspects of Golf Ready, Set, Mow!.....8 By Brian Duffy

The Floating Green at Coeur D'Alene - Still a Wonder of the Golf World...... 14 By Jay Flemma



When Nature Calls......20

By Andrew Penner



Netex Sport Netting......26 By Andrew Penner

Maintenance budgets: What NOT to cut30

By Jeff Langner

company spotlight

Western Wood Strutures16 Green Flush Tecnologies22

from around the industry

Trending	10
Trades Place	32









All articles are online for ease of reading & sharing.

VISIT US TODAY!

WWW.GOLFCOURSETRADES.COM

REPLACEMENT ENGLISS AND ENGINES INSTALLATION KITS

- ALL KITS GUARANTEED

 SO YOU ARE 100% SATISFIED
 - UNLIMITED TECHNICAL SUPPORT
 WITH EVERY COMMERCIAL-GRADE SOLUTION
 - WE SERVICE ALMOST EVERYTHING
 INCLUDING MOWERS, UTILITY CARTS, SKID LOADERS
 TURF AND MAINTENENCE EQUIPMENT
 - FREE SHIPPING

 WITHIN CONTINENTAL UNITED STATES



WWW.REPOWERSPECIALISTS.COM

INFO@REPOWERSPECIALISTS.COM

DON'T LET GOOD GET IN THE WAY OF GREAT.

More Flexibility. More Options with the 622 SO/SG/SGR Reel Grinders. Foley United gives you the option to build a machine that fits your needs today or in the future.

You have always wanted a Foley. Now you can have one.

Sharp is **GOOD**

Sharp & Removing

Sharp, Removing Taper, & Reliefing to OEM Spec is **BEST**

Spin Only **622 SO**

Spin & Gauge

Spin, Gauge, & Relief 622 SGR, 633 ACCU-Pro

- ♣ Touch-Up Spin Grind
- Automated Infeed
- Rear Roller Mounting
 Delivers More Accurate
- ♣ Touch-Up Spin Grind
- ★ Keep it sharp and in a OEM Cylindrical Shape
- ◆ Touch-Up Spin Grind?

 No Problem—pull the reel off the
- OEM Spec? No Problem—no one does it easie faster, safer, or more efficiently than Foley United!

ACCU-Spin 622 SO Reel Grinder





800-225-9810 / www.foleyunited.com

Mechanical Aspects of Golf

by Brian Duffy

Ready, set, mow!

The weather is still cool here in the Midwest but, winter has made the turn and is heading for spring. The grass is awakening from its winters rest and is beginning to grow.

Speaking of making the turn, I just finished watching the end of the Daytona 500 which is NASCARS's season opener and their premiere race of season. The race team's preparation and the pit crews performance are obviously the results of a lot of work and planning. The NASCAR teams spend all winter preparing and practicing. They have spare parts and spare cars prepared, along with back up plans for their back up plans. When these race teams roll out of their shops and head to Daytona Beach, Florida they are ready for their season! One very important item found in the race track pits is a larger than life tool chest called a The War Wagon. The War Wagon is filled with all sorts of different tools, equipment and spare parts to remedy any situation during the race. The teams appear to be ready for any mechanical failure or accident. So what's in 8 - GolfCourseTrades May 2018



your War Wagon for when a mower breaks down on the golf course?

Here a list items that should be a part of the Golf Course Equipment Technician's War Wagon.

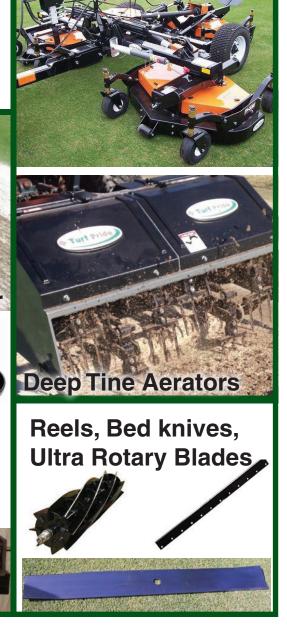
Gas and diesel fuel cans, engine and hydraulic oils, 50/50 mixed gallon of universal coolant and funnel to top off fluids. Twelve volt jumper box or jumper cables, an assortment of wire, fuses and solderless connecters and jumper wires to momentarily bypass a problematic safety switch. A few electrical test tools



turfprideusa.com 800.426.3634 sales@turfprideusa.com







Finish Mowers

including a VOA meter, test light and remote starter switch. For flat tires, a portable air tank or air compressor, a can of fix a flat, flat tire repair kit, a jack and wrenches to change a flat tire including common spare wheels and tires. Also aerosol products like WD-40 to dry wet ignition components and loosen stubborn bolts, brake cleaner, dry gas, starting fluid. For recovery a tow rope or chain, ratchet strap to secure a failed hydraulic cylinder or broken mower lift arm. A basic set of mechanics hand tools, duct tape and electrical tape and an assortment of hydraulic caps to block off a hydraulic leak, a bag of oil dry. A height of cut gauge, plus a cell phone with internet access to look up part diagrams and service and troubleshooting information. Sometimes breakdowns may even require the use of set of oxygen and acetylene torches.

This a daunting list but having these item at your disposal on the golf course should get you through most breakdowns in record time. I am sure you have items in your War Wagon that I did not mention.

Besides having your own version of War Wagon, what is your back up plan for your mowing equipment? The perfect scenario would be a shop full of back up equipment that is sharpened and ready to go. An alternative to back up equipment is a sharpened spare cutting unit for each key piece of daily used equipment like the greens and tee mowers, trim and fairway including rough mowers.

If you don't have the luxury of spare cutting units, the next best thing is to have new bed knives and rotary blades for each piece of equipment. Also spare front and rear rollers, hydraulic reel and deck motors. These parts do not have to be brand new parts to be effective. Other spare parts should include extra oil, air, hydraulic and fuel filters and popular v belts. There is room in every budget for some preparation on how to handle equipment breakdowns.

Now take a look at your fleet whether it's large or small, has every piece of equipment been serviced and prepared for the season? If you have not not been keeping maintenance records for each piece, now is the time to start. Pick up a few packs of vinyl numbers sets from the local office supply and number each piece of equipment so it can be easily identified and logged with its model and serial number in a maintenance record book. Your log book can be on paper in a binder or build a spread sheet on your PC, laptop or smart phone. Keeping records allow you to plan when routine maintenance is needed. The easiest way to track record keeping is with the equipment's hour meter. Make sure the hour meters function on each piece of equipment.

It really does not take a lot of preparation to be ready to begin the season. You just need a little planning and some double checks of your equipment. In a week or so before the first crew members come back and begin the season, take the time for a final check of the equipment. Just as a pilots performs a pre check of his airplane you are making your pre check of the mowers for proper operation. Recheck the fluid levels, tire condition and air pressure, fill gas or diesel fuel tanks, add a shot of fuel stabilizer if you had not done so at the end of last season. If your operators are not in the habit of checking fuel and oil levels and tire condition before leaving the shop get them to do so. This will significantly reduce breakdowns out on the golf course. I would like to hear what is in your War Wagon. Are you ready for the 2018 season? Feel free to submit your comments or questions to Brian Duffy at mxk92@yahoo.com

So, when the green flag drops on your mowing season, and that first belts breaks or tire go flat you will be ready to make timely repair and get the mower back out in the field. It is great feeling when you can perform like a top notch one man pit crew and get the repair done in a timely manner. The Golf Course Superintendent and crew will most certainly appreciate your time and effort spent in preparation over the off season.



Brian Duffy's career spans thirty five plus years in the golf industry. With a diverse background of working on golf courses and turning wrenches on all types of equipment. Plus teaching Golf Course Equipment Mechanics and progressing into turf equipment sales and service. For any questions, comment or ideas contact me at mxk92@yahoo.com

TRENDING

SiteOne Landscape Supply Expands Service Offerings with New Agronomic Sales Center



SiteOne® Landscape Supply (NYSE: SITE) announced the opening of its Agronomic Sales Center for the Atlanta area during a ribbon cutting ceremony this week in Doraville, Georgia.

The 30,000-square-foot facility will enable SiteOne to stock up to 880 tons of bagged agronomic material to better serve the area's customers who frequently purchase large quantities of fertilizer and control products. This facility also provides SiteOne's customers access to a wider assortment of agronomic and control products from top industry brands, including its own private label LESCO® products. Landscape tools and supplies, irrigation equipment, landscape lighting and golf course accessories are also available.

"When looking at our agronomic business, we saw an opportunity to deliver a higher level of service to those customers who needed truckloads of product with regularity," said Doug Black, Chairman and CEO of SiteOne. "Our goal is to deliver a world-class customer experience to every one of our customers, whether they buy one bag of fertilizer or a truckload. The addition of these agronomic sales centers will allow us to better meet the demands of our larger agronomic customers with unmatched product availability, service and expertise."

John Gertz, vice president of category management at SiteOne, leads the company's agronomic business. He believes that creating this distribution infrastructure is a necessary step toward elevating SiteOne's position within the Atlanta market. "Companies who operate at that level need a supplier who can consistently meet their high demand for resources. We believe that combining the sales center with our

agronomic expertise puts us in the best position to consistently deliver excellent service and quality products to customers working in a high-demand market."

The sales center officially began operations in late February, in advance of the ribbon-cutting ceremony. The facility replaces a previous SiteOne store location at 2425 Weaver Way and is open 7:30AM – 4:30PM and available to take orders, discuss needs and provide estimates. Learn more by contacting your SiteOne representative or by visiting the new hub at 2351 Button Gwinnett Drive, Suite 100 in Doraville, Georgia.

About SiteOne Landscape Supply:

SiteOne Landscape Supply is the largest and only national wholesale distributor of landscape supplies in the United States and has a growing presence in Canada. Its customers are primarily residential and commercial landscape professionals who specialize in the design, installation and maintenance of lawns, gardens, golf courses, and other outdoor spaces. www. SiteOne.com

Solutions 4Earth, LLC, Debuts NUTRIMEND Brand Fertilizer for Agriculture & Turf

Solutions 4Earth, LLC, is offering a liquid product specifically geared toward mending soils that are challenged with high salt or sodium levels. NutriMend™ 10-3-0 Plus Calcium and Micronutrients is a novel concept in approaching soil health and plant nutrition. This product was developed in response to customer requests for a product that combines various methods to help reduce soil salinity and/or sodium levels in one package.



NutriMend chemically reduces water, soil bicarbonate and carbonate levels. The addition of 3 percent calcium, humic acids and other sequestering agents helps displace sodium on soil colloids to assist in leaching sodium out of the root zone. Biologically, additional carbon sources help stimulate microbial growth to further reduce soil salts and build up soil structure. The addition of a wetting agent/soil penetrant physically helps drive the active ingredients into the root zone more efficiently and wet the soil to enhance NutriMend's effectiveness.

NutriMend is labeled for a wide range of agricultural crops and turf (tees, greens or fairways) and can be used as a pre-plant treatment or during production/growth. The product is an easy-to-use liquid. It can be applied as a spray or through irrigation systems. The acidic nature of NutriMend can also help keep lines clean and free of built up lime. The product is available in 250 gallon totes or 2.5 gallon cases.

"This is another way Solutions 4Earth helps customers meet challenges with managing their crops' nutritional health in a more environmentally conscious approach," states Mickey Brown, CEO of Pro-Turf International. "In fact, recent work by Dr. Marco Shiavon at The University of California – Riverside shows that NutriMend can significantly benefit turf in high salinity situations"

For more information about local availability and ordering, contact Solutions 4Earth at 855-834-3882 or www.solutions4earth.com.

Solutions 4Earth, LLC, is an environmental products company specializing in new generation plant nutritional products and waste management solutions.

Award-Winning Agronomist Rick Elyea Launches Elyea Agronomic Consulting LLC

Rick Elyea, formerly with Simplot/Jacklin Seed, has announced the launch of his new consulting business, Elyea Agronomic Consulting, LLC. Elyea is a 35-year member of the Golf Course Superintendents Association of America (GCSAA), having been a former Superintendent in Iowa and Nebraska.



He also served on the Board of Directors with the Golf Course Builders Association America (GCBAA) for 23 years and received the Perry Dye Award in 2010. This award is given by the GCBAA to members who "unselfishly contribute above and beyond 'the call of duty' to make positive changes in the Association."

In his new venture, Elyea will work to provide agronomic, erosion and environmental recommendations for new and renovation golf course projects around the world. He has been doing this work with members of the ASGCA and EIGCA for the last 30 years and is now focusing on it through a consulting business. His experience also includes large landscape projects, native grass reclamations, and agronomy for professional sports fields, which he has worked on in the US, Europe and Asia.

"In golf course construction and renovation, there's a lot to take into consideration, and a lot on the line," said Elyea. "I'm looking forward to bringing my experience to projects and courses around the world to help them succeed."

NEWLY REVISED & ENHANCED SUPPLIER DIRECTORY

What you get:

- Update your photos & promotions daily!
- Superintendents view in-depth information at a glance.
- Now with video available!
- Capture & engage with buyers INSTANTLY!

www.GolfCourseTrades.com

Let's Talk About Bunkers...



Spring has begun, the days are longer, and everyone is dusting off their clubs to get out to enjoy the warmer weather. While it's great to see everyone out enjoying themselves, I am noticing a disturbing lack of etiquette regarding bunkers. Now, I know what you're thinking, "the superintendent is just mad because a few people forgot to rake a few footprints, what's the big deal. The grounds crew is just going to rake them in the morning!" While it is true, the grounds crew is going to go through all the bunkers the next morning, and rake them before play, this line of thinking misses the point. The bigger issue for me is that it shows a lack of regard for the golfers behind you. When I see footprints in a bunker, like the one pictured above, I'm not mad that we had to rake it. I'm frustrated that those footprints were there all afternoon, negatively impacting the conditions for other golfers.

The grounds department takes the condition of our bunkers very seriously and will continue to provide the best possible playing conditions, but cannot control how they are maintained after we leave for the day. We feel that if everyone was more mindful of the golfers playing behind them, negative course conditions like this would take care of themselves.

If anyone has any comments or concerns regarding bunker maintenance, please fee free to contact me. Thank you and, as always, see you on the course! From the blog of Superintendent Chris Cook at Bailey Ranch Golf Club.

http://baileyranchgolfmaintenance.blogspot.com/

Aeration of Greens Dry-Ject Week



Spring is upon us so it's time for some inputs to our greens to help bring about strong and vigorous plants that will thrive during the summer season. Our first application is a process called Dry-Ject. This process shoots a bead of water with sand penetrating the green surface and going to a depth of 4-5". This process will:

- Stimulate root and shoot growth,
- Improve surface drainage and water penetration
- Dilute thatch and build a mat layer which is a proper combination of sand

and diluted thatch which assists in proper sized ball marks on our greens. Too much thatch, soft greens and too little can provide no protection for growth area of the plant. See below

• Provides additional sand on the surface of the greens to smooth blemishes and covers the crown of the plant. The crown is the key growth area of the plants

where's shoots grow up and out and roots grow down. If this area becomes damaged shoot and root growth of the plant will be disrupted

I have a video of the process with some discussion. Brushing of the greens and a little ball roll out demo.

From the blog of Joe Wachter Superintendent and General Manager at Glen Echo Country Club http://geccgcm.blogspot.com/

Jerry Pate Turf & Irrigation



Hose Reel and Foam Marker, Gold Serviced, 1633 hours. \$21,900































2006 GM3500-D Side Winder. 3288 hours, Runs Good

\$5,500



2012 Toro GR3320 Hybrid/Gas, 3wd, 8 blade dpa, 1982 Hours \$11,900

MDESHPPING • FINANCING UPTO 36 MONTHS • ASKABOU



Avaffable

www.preowned.jerrypate.com 1-800-282-4792 ext 3204









NEVS

From Around the Industry

For More News, Visit GolfCourseTrades.com

Honey Bee Health Coalition, Partners Secure \$475,000 Grant to Test Potential Treatments for Destructive Varroa Mite Infestations

The Honey Bee Health Coalition announced today that it has collaborated with an international team of 12 scientists to secure more than \$475,000 in grant funds from the Foundation for Food and Agriculture Research to facilitate the testing of chemical compounds that could help beekeepers more effectively treat Varroa mite (Varroa destructor) infestations. This funding, matched by participants and industry members to provide more than \$1 million in total support, also will document how mites develop resistance to such treatment.

The funding will support the identification, lab testing, and field testing over the next three years of "orphaned" chemical compounds that have known acaricidal (miticide) activity but have not been specifically tested against Varroa mites. Many of these compounds are trapped in a bottleneck where the costs of testing and commercializing them are too steep for testing, effectively leaving them on the shelf.

"Varroa mite pose serious challenges to bees and hives. This grant will provide critical support for the development and testing of new chemicals that could help beekeepers better manage Varroa mite infestations," said Principle Investigator Steven Cook, Research Entomologist, USDA-ARS, Bee Research Lab. "We look forward to sharing the results of these efforts and support beekeepers' efforts to implement integrated pest management strategies."

The Foundation for Food and Agriculture Research grant will provide crucial support for this \$1.1 million effort, which is championed by a wide array of national and international public, private, and NGO organizations, including USDA-ARS, University of Nebraska, Alberta Agriculture and Forestry Department (Canada), University of Georgia, Universitat de València (Spain), Ohio State University, and Auburn University.

In addition to the grant funding, Project Apis m. provided financial support. Other organizations also have provided in-kind support, including bees from a number of regional beekeepers and compounds from Bayer.

"Varroa mites are rapidly adapting to treatments beekeepers currently use. This project will not only address this growing problem, but also break the bottleneck that has formed around compounds we already know can treat mites," said Jennifer Berry, University of Georgia, Honey Bee Lab. "We're excited to work together with our partners across the world as we strive to cooperatively address the persistent problem of Varroa infestations."

Varroa mites are one of the driving factors in recent colony losses, which threaten productive agriculture and the crops that rely upon commercial pollination services. Left untreated, a single infestation can wipe out colonies and spread rapidly across a region. Given the scale of these problematic parasites in North America, Europe, and around the world, the Coalition has worked to help beekeepers monitor and control Varroa mites through the development and dissemination of key resources and information.

In addition to this project, the Coalition has developed an expansive guide laying out best practices to detect, monitor, and control Varroa mite infestations. The Tools for Varroa Management Guide, is now in its sixth edition and has been downloaded by thousands of beekeepers across the United States and Canada — and as far away as New Zealand.





"I spray everything through those dual fans these days. Weekly foliar apps on greens, herbicide, insecticide, nematode treatments. You name it, we probably sprayed it. I have reduced my Primo applications due to the fact that I am getting much improved coverage on the plant."



Chris Senior, Countryside Country Club Clearwater, Florida

Get better coverage with less drift.

Get Greenleaf's Asymmetric DualFan nozzles.

www.GreenleafGolf.com · 1.800.881.4832

Country Club Landscaping and Equipment Repair

MANY ITEMS ARE AVAILABLE AND NOT **LISTED PLEASE CALL 1-440-235-2157** AND ASK FOR JIM OR VISIT THE WEBSITE



2012 John Deere 2500 BG \$9500



2008 John Deere 1600 WAM \$14750



2016 Toro 5800G 300 gallon sprayer \$37500



2010 Toro T with mowers and verticuts \$13500



2012 Cushman **Truckster High Flow** 780 hrs \$13850



2014 Toro 3040 Sandpro 5 each 2012 Jacobsen 106 hrs w/Plow and Rear Rakes \$13500



AR 522



2012 Toro 3500D 1300 hrs \$17500



2016 Toro 5510 D 550 hrs MINT



2012 Jacobsen LF 570 2wd



2 each 2013 Toro 3150 Q Greensmowers



2010 Toro 5510 4W/D \$24500



2013 Toro 4300 rotary w/canopy



2011 Toro 5510D 1000 hrs \$22500



Planet Air HD50 Aerator Like New \$8500/trifecta \$15500



2011 Dakota 440 topdresser really low hrs mint \$20750



Topsoil Screener 400 hrs excellent \$23500



2011 John Deere 2030 diesel progator aux hyd \$12500



2016 Steiner 440 diesel 2012 Jacobsen Eclipse with toughcut deck 60 hrs \$24500





2017 Agrimetal TB280

2014 Club car Turf II power dump low hrs \$4850---2014 Toro 5410 1300 hrs \$17995---2014 Toro 5410 fairway mower \$17750---2012 Toro 5510 serviced and sharpened nice \$16750---Tycrop MH400 topdresser with spinners \$9000---2011 T \$24000---2013 Ventrac Diesel w/108 \$16500

mower \$19900---2011 Toro 3040 sandpro w/new engines \$7995---2013 ClubCar Turf I w/canopy 4 each \$4000---2011 Toro HDX workman 1300 hrs \$11500---Jacobsen GA 24 Walk Behind Aerators \$5000---John Deere Walk Behind Aerators \$3000---Jacobsen V 62 Sweeper \$8500---Toro Rake-O-Vac pto \$3000---Toro Prosweep 5200 \$5500---2011 Toro Proforce Turbine Blowers from \$4000---Peerless Grinder Set \$11500---2012 Toro MDX Utilty Cars \$4500----2009 Jacobsen GKIV Plus Deisel \$12500----Dakota MH440 Topdresser \$11500---2016 Toro Dingo TX1000 \$26500

www.usedturfequipment.com

The Floating Green at Coeur D'Alene – Still a Wonder of the Golf World

by Jay Flemma

Take a vacation at Coeur D'Alene Resort, tucked cozily by the Idaho lake of the same name, and you will remember it for the rest of your life.

"I've been there!" gushed one of my friends who saw pictures over my shoulder as I wrote this article. "The water is that blue! The grass is that green! The sky is that sunny!"

His enthusiasm is echoed almost universally. Forest-fragrant air, dappled sunshine on azure waves, airy rooms with tall ceilings, a galaxy of sporting activities, impeccable service: since it opened in 1965, every superlative you've heard about Coeur D'Alene understates the case, and anyone who made the trek to this remote, yet idyllic Pacific Northwest retreat has declared it Heaven on Earth. Take your spouse there for a week, and they owe you for a decade.

Coeur D'Alene was a favorite of Jet Setters, Hollywood, and Main Street alike even before the golf course opened in 1991. But once it came on line, golf became the premiere attraction, primarily because Coeur D'Alene is home to a hole unique in golf - the par-3 14th with 14 - GolfCourseTrades May 2018





its world-famous "Floating Green" - an iridescent emerald island set in a sparkling sapphire

You've seen island greens before, most notably on the PGA Tour at Sawgrass, Scottsdale, and PGA West. But where each of those has a walkway you can take to the green by foot. Coeur D'Alene's is a true island – as in you need to take a boat to get to the green...it's either that or swim.

Now here's the best part: even though it weighs a gargantuan 5.5 million pounds (or 2,200 tons, if you prefer) and comprises a grand total of 15,000 square feet, the entire green complex really does float - it's connected to the mainland by an underwater system of pulleys that move the green around the lake.

"It can play anywhere from 90-220 yards, depending on your tee box," explained Scott Miller, the golf architect who designed the course. "The green is held in place by four cables; two attached to enormous ship's anchors placed in the bottom of the lake, about 20-25 feet deep at that point. Two more cables lead to the land and move the green back and forth."





GREENVILLE TURF & TRACTOR 866-485-TURF (8873)

www.greenvilleturf.com
AL • SC • TN • MS • GA • VA

SHEARER GOLF 855-GOLF-909

www.shearerequipment.com
NE OH • NW PA • N WV

EVERGLADES EQUIPMENT GROUP 888-746-8873

www.evergladesequipmentgroup.com SOUTH FLORIDA

C & B OPERATIONS, LLC 800-823-9242

www.deerequipment.com

IDAHO • MONTANA • N & S DAKOTA • NEVADA



The idea was resort owner and developer Duane Hagadone's. While working out routings with Scott Miller, then a young architect fresh off a successful run as one of Jack Nicklaus's design associates, Hagadone looked out at the little island which, at the time, housed a logging mill.

"Why can't that be a green? A moveable floating green?" he asked everyone. "You're talkin' crazy!" they'd all respond. According to legend, even Nicklaus told Miller to try to talk Hagadone out of it.

You can't really blame Nicklaus, Miller, or anyone else for their skepticism. Meddling, tinkering developers/owners/greens chairman are usually cautionary tales. For every Eric Bergstol who beat the odds and did excellent design work even though it's not his primary gig, there's dozens of Bob Langs who made laughably bad gaffes. Usually, the rule of thumb is that the money may remain

in the room so long it remains silent and pays attention.

But Hagadone was more far-sighted than any experts gave him credit for. What was dismissed as a gimmick became not merely a feature attraction, but the most recognizable and beloved icon of the resort. Yes, the entire golf course is excellent – pristine conditioning, an idyllic natural setting, and a course wide and welcoming enough that you'll have a good chance of shooting better than your handicap, but 14 is the showstopper, a centerpiece.

"It's built like a big ship," explained Miller. "The entire green complex is comprised of concrete cells that fit together like Legos or Tetris pieces. (Many bridges in the Pacific Northwest are assembled the same way.) Each cell is about three feet wide by three feet high by six feet long. They are hollow in the middle, filled with Styrofoam, which creates buoyancy, and if they crack they won't take on water."

Once assembled, the total height of the green was 16 feet - 12 feet under the water, and four feet above. The whole green complex is 35 yards deep and 55 yards across. Besides 6,500 square feet of putting surface maintained to stimp at about 9.5-10, the green complex features two bunkers, colorful flower beds, a port to moor the boat and a swath of rough.

It's a seven minute ride from the pier set by the lakeside tee box to moor at the edge of the long enough to forget that you were one of 28,000 golf balls yearly that fall into – possibly - the most beautiful lake in America.

There's even a digital monitor with an LCD readout of the day's distance. In my late afternoon round, they actually put the green in motion so I could count down to perfect 8-iron distance...140...139...138...137...136...FIRE!

Now there are 28,001 balls in the water.

Upon reaching the green, you get a 360-degree, panoramic view of the lake. Hang gliders sail past, kaleidoscopic-patterned hot air balloons float serenely by and water skiers wave at you before face planting and realizing they better pay attention to the boat, not the golfers. It's a surreal setting for golf. Yet under your feet is the command center – the control point for what was, at the time, the most

Continued on page 17
GOLFCOURSETRADES.COM - 15



COMPANY SPOTLIGHT



Western Wood Structures

Working Wonders with Wood

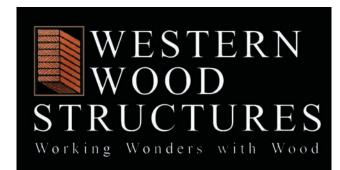
Timber bridges offer the natural beauty, versatility and value that are an excellent fit within any project or environment. Western Wood Structures is unique, as we can offer design, supply, delivery & installation all together as a single price. We are your complete timber bridge company.

Given our extensive experience in designing and supplying glue-laminated timber bridges, we can recommend them for many reasons:

- Glulam can be manufactured into many configurations, including curved members and structural components, which allows the designer wide latitude in determining bridge shapes and styles.
- Our timber bridge components are prefabricated and arrive at the site as a complete package.
- Glulam is a relatively light construction material, which allows the use of less expensive equipment to install the bridge.
- Modern pressure preservative treatments extend the service life of glulam bridges to 50 years or more.

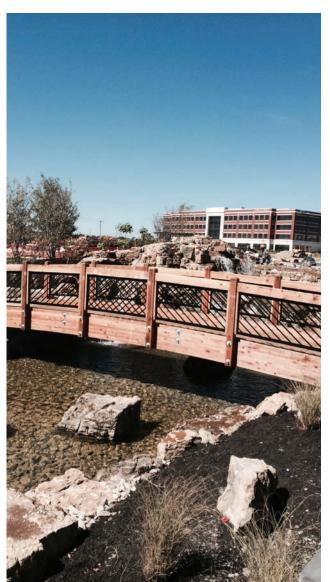
Our sales and engineering staff are available to discuss your bridge construction plans and ideas. WWS timber bridges meet all applicable code requirements, and are competitively priced. We are able to quickly deliver preliminary cost estimates based on the length, width and load requirements of an intended structure. Firm price quotes include design costs as well as detailed fabrication and assembly drawings.

We have accomplished many things in our 49 years as a timber products business in Oregon. But, most important is what we have accomplished for our customers. The common themes in our work are experience, value and the timeless appeal of timber products.



Web Site: www.westernwoodstructures.com E-mail: bridges@westernwoodstructures.com











"We offer high quality, pre-owned turf equipment for golf courses; and all other outdoor sporting venues."



SEE HUNDREDS MORE ONLINE AT www.usturfequipment.com

Rotary Mowers www.usturfequipment.com



2011 TORO MP 5800 Sprayer Hours- 2163



NEW TORO FLEET JUST IN!

2015 TORO GREENSMASTER 2012 CUSHMAN TRUCKSTER 3300 Tri-Flex Hours-1055



W/ Vicon Spreader



2012 JACOBSEN AR 3 Hours- 1362



2015 TORO GREENSMASTER 3300 Tri-Flex Hours-1021





2015 TORO GREENSMASTER 3150-Q Tri-Flex Hours- 1313



2014 CLUB CAR PRECEDENT (Electric)



2014 JACOBSEN AR3 Only 264 Hours



2015 TORO GREENSMASTER 3150-Q Tri-Flex Hours- 1176



2015 JACOBSEN GROOMS MASTER II 1,436 Hours \$10,400





2012 JACOBSEN AR 522 Hours - 1398



2012 SMITHCO **TOURNAMENT ROLLER**



2012 TORO REELMASTER 2015 CLUB CAR PRECEDENT 5410 Hours- 1800hrs



(Gas)



VERTI-DRAIN 7117

Daniel Smith, Managing Partner (704) 956-5472

980-354-7122

Visit Us 9540 Mission Church Rd. Locust, NC 28097

Fleets of Club Cars Now in Stock!

Continued from page 15

The Floating Green at Coeur D'Alene – Still a Wonder of the Golf World



replace them, and it was a very large undertaking. We also have to grease the bearings and winches. Preventative maintenance is critical. After all, this is why people come."

It was as difficult an undertaking as it sounds, and when things went wrong, they went completely haywire.

"When we built it in 1990, for access reasons, we had to do it in a bay 3-4 miles from the lake and then tow it into position. The crane that placed the cells could only reach so far, so from time t time we had to turn the assembled pieces with tug boats," Miller recalls chuckling. "The first time they turned it, they got a little too eager not realizing that when you get something that heavy moving it takes a lot to get it stopped. We were only going to spin it

180 degrees, however it started spinning out of control and it took four tugboats 15 minutes to get it stopped and back into place."

Moreover, everything has to be taken out there by boat - walking mowers, topdressers, aerifiers, sand for the bunkers flower deliveries, everything.

"The owner had a vision, and his ideas were not popular; he went against the grain, but he wanted fun and enjoyable, and that's what he got," stated Hicks. "Word of mouth is a big piece of advertisement. He said people would come back, and they did." ■

When not reporting live from major sports championships or researching golf courses for design, value and excitement, multiple award-winning



sports writer Jav Flemma is an entertainment. Internet, trademark, and banking lawver from New York, His clients have been nominated for Grammy and Emmy awards, won a Sundance Film Festival Best Director award, performed on stage and screen, and designed pop art for museums and collectors. Twitter @JayGolfUSA

ure as head superintendent. "The cables are substantial - 7/8ths of an inch thick, and we inspect them twice annually. Once we had to

the cables and a dial with settings marked at

about four yards per minute, but it's much

more than just a "dial and go" operation.

five yard intervals position the green. It moves

"Nothing is easy about it," confided Tom Hicks,

who until this September served a long ten-



THE LEADER IN EQUIPMENT AND PARTS FOR THE GOLF AND TURF INDUSTRY

800-596-8873 | cutteronline.com

Greens **Mowers**



2014 JACOBSEN ECLIPSE 322 Very Nice Units! 2 Available! Priced at \$14,900



2013 JACOBSEN GK-IV+ LOW HOURS! 4 Available! Prices start at \$14,900



2012 TORO GR3150-Q 1800 hours! Very Nice! Priced at \$15,900



2012 TORO GR3300 TRIFLEX 1771 hours! Priced at \$17,900



2007 JOHN DEERE 2500E Gas! OA5 Reels! Clean! Priced at \$10,900

Sprayers, **Rollers &** Rakes



2011 SALSCO ROLLER Honda Engine! Trailer! Priced at \$8,900



CUSHMAN SPRAYER 300 Gallon - Diesel! Priced at \$9,995



TRU-TURF ROLLER 52" with Honda Engine! Priced at \$7,900



SMITHCO BUNKER RAKES 3 Available! Call Now! Prices start at \$4,900



2007 TORO MP5700D 300 Gallon - Diesel! Priced at \$12,900

Vehicles



2013 TORO WORKMAN HD Air-cooled! NICE! Priced at \$12,900



2013 TORO WORKMAN HDX-D - 1360 hours! Priced at \$17,900



DEERE PROGATOR 2030A 2275 hours! Diesel! Priced at \$12,900



2010 CUSHMAN TRUCKSTER 1400 hours! ROPS! Priced at \$12,900



2013 CLUB CAR TURF II Several Available! Priced at \$5,495

Rotary & Trim **Mowers**



2013 TORO GM3500-D, SW 1660 hours! Great Unit! Priced at \$22,900



2009 TORO RM3100D, SW 1070 hours - 84" Cut! Priced at \$12,900



2013 JACOBSEN AR522 2560 hours! Clean Unit! Priced at \$16,900



2014 TORO GM4700-D 1960 hours! NICE! Priced at \$42,900



JOHN DEERE 2653B 650 hours! 84" Cut! Priced at \$9,900

Fairway Mowers



2014 TORO RM5610D Cross-Trax 4WD - 2480 hours! Priced at \$24,900



2007 TORO RM5410-D 2250 hours! Clean!! Priced at \$13,900



2012 JACOBSEN LF570 1280 hours! CLEAN! Priced at \$19,900



2012 JOHN DEERE 7700 1200 hours! 2 Units! Priced at \$16,900



2008 JOHN DEERE 7500 2077 hours! 4WD! Priced at \$8,900

Other Equipment



TORO PP200 TOP-DRESSER Spinners! Wired! Priced at \$8,900



EXPRESS DUAL 3000 SPIN GRINDER - Lift Table & Hood! Priced at \$14,900



Nice machine! Priced at \$7,900



2012 TORO PROSWEEP 5200 TYCROP PP180 TOP-DRESSER KUBOTA M5700 TRACTOR Twin Spinners! Honda Engine! 2200 hours! Turf Tires! Priced at \$6,900 Priced at \$13,900



NEW WEBSITES

cutterpartsonline.com



NEW & USED Parts We Offer

- ► Belts, Spindles & Pulleys
- ➤ Seats, Frame & Body
- Electrical
- Cutting Units
- **Service Parts**
- **Engine Components**
- Hydraulics
- Drive Train Components
- ► Tires, Wheels & Casters
- **►** Engines

Engine Components



AKT NAME	REPLACES OEM #	PRICE
ISED 12V Fuel Shut Off Solenoid	338289	\$75

NEW Replacement Water Pump 107-0129, 115-1561 \$159 **NEW Water Pump Gasket** 98-7784 NEW Kubota Cylinder Head 108-7055 \$1,469 **NEW Cylinder Head Gasket Set** N/A \$165 **NEW Glow Plug Controller** 98-7611 \$155 NEW 12V Electric Cooling Fan 114-8385 \$249 **NEW Fan Clutch** 104-2212 \$179

Hydraulics



PART NAME

USED Hydraulic Cylinder USED Reel & Deck Motor **USED Hydraulic Reel Motor USED Hydraulic Reel Motor NEW Hydraulic Reel Motor NEW Seal Repair Kit** NEW Hydraulic Reel Motor 2 Port NEW Hydraulic Reel Motor 3 Port

REPLACES OEM # PRICE \$104 99-8159, 105-3822 \$395 105-972, 105-9820, 117-5141 \$269 TCA15598 \$269 TCA12090 \$249

\$38 92-8863 \$188 105-9770 93-1375, 112-9200, 108-6487 \$249

123285, 4143249

Cutting Units



PRICE

Tires, Wheels & Casters



PART NAME

USED Pull Link ASM
USED Grass Catcher Frame
USED Grass Catcher Hook Bracket
USED Lift Yoke w/Ball, Bracket & Pin
NEW Bed Bar Pivot
NEW Roller Rebuild Kit
NEW Roller Rebuild Kit
NEW Textron Envirodeck Cutting
Unit

REPLACES OEM #

108-6542	\$20
11M7082,TCA12076	\$31
14M7400, TCA15549	\$39
MT6233, MT6295, TCA16879	\$133
19-9820	\$14
114-5430	\$89
107-1595	\$39
N/A	\$500

PART NAME

NEW Flat Free 8" Smooth Tire & Whee
NEW Golf Car Tire
NEW 18x9.5-8 4 Ply Smooth Tire
NEW 18×9.5-8 4 Ply Super Turf Tire
NEW 20×10-10 4 Ply Ribbed Tire
NEW 26.5×14-12 4 Ply Turf Tire
NEW Flat Free 8" Smooth Tire & Whee
NEW 11x4-5 Smooth Flat Free Tire &
Wheel

REPLACES OEM #

	REPLACES OEM #	PRICE
l	several	\$59
	several	\$39
	110-5133, 28-3680	\$59
	119-3516	\$53
	94-5261	\$69
	several	\$151
l	several	\$59
	4252390	\$79

Engines



NEW - 18HP Briggs & Stratton Vanguard Engine \$1,295 *includes delivery!



USED - Kubota D1105 **Diesel Engine** \$2,695 *includes delivery!

BUY 2 OR MORE DELIVERED



Contact us at:

Lee - 877-912-REEL (7335) or lee@expressreel.com Doug - 561-662-1936 or wwwequipment@aol.com Visit us on the web @ www.wwsod.com **SERVING THE TURF INDUSTRY "WORLD-WIDE" SINCE 1985**



2011 Toro GM4500D w/2086 hrs - \$27,500



w/1200-1700



2010/2011 Toro 3100D's Soil Relievers/Vertidrains 2012 Toro 3320 TriFlex 2009 Toro GM3500D's \$7,500



Hybrid w/1100 hrs-



2000 hr Range \$9,000

FAIRWAY MOWERS



2010/2011 RM5610's w/1700 hrs -\$15,000



2011 Carryall Turf 1's \$4,500



2011 SandPro 3040's Repowered New Engine \$9,000



2011 Toro 360 All Wheel Drive & Steering w/90 hrs \$15,500



2012 Multi Pro 1250's w/1600 hrs -\$15,500

WALKERS \$1500-\$4500 CAL



2011/2012 Toro 3150Q's w/less than 1500 hrs \$14,500



2010/2012 Salsco Rollers \$6,500



w/ 1400-1800 hrs \$12,500-\$17,500



2011/2012 Toro 5510's 2010 Toro 6500D 4 W/D w/ 1765 hrs-\$12,500



2011 Toro 5410's w/1500-1900 hrs. \$12,500-\$17,500



INDUSTRY INSIGHT

Clivus Multrum: When Nature Calls

by Andrew Penner

Regardless of what you want to call it - the loo, the John, the potty, the throne, and it gets more "colorful" from there - the restrooms on your golf course might be the most indispensable buildings on the property. Sure, depending on your gender (or what "job" needs doing), "the woods" can work in a pinch. However, truth be told, every golf course on the planet needs on-course facilities. And preferably options that won't scare away the clientele. Enter Clivus Multrum to the rescue.

For many golf courses, the issue of providing washrooms in the most useful locations - like in the middle of either nine, for example - is often determined by logistics. In other words, when the fifth tee box is situated in "the middle of nowhere," tapping into an existing municipal sewer system may not be a viable option. And, even if it is, installing the necessary infrastructure can be extremely costly, disruptive to the golf course, and a downright difficult proposition.

Sure, portable toilets can be a relatively simple, cost-effective solution. But, when members and guests are paying a premium to play, let's be honest - these cramped, flimsy, odorous little outhouses just don't cut it. A better solution is, 20 - GolfCourseTrades May 2018



well, better. For many golf courses, a permanent, easy-to-install, composting toilet facility is the ideal solution. And Clivus Multrum - thanks to their Trailhead M54 model - fits the bill.

Since its incorporation in the United States in 1973 (the company was founded by a Swedish engineer, Rikard Lindstrom, who, in 1939, developed the first composting toilet to prevent pollution in the Baltic Sea), Clivus Multrum has manufactured and sold hundreds of composting toilets and greywater systems throughout North America and beyond.

A sampling of their clients include: state parks, national parks, zoos, wilderness camps, sports complexes, visitor centers, nature centers, construction sites, ski resorts, and, yes, golf courses.

Besides the obvious "green" benefits (no water is used!), composting toilets require little maintenance, are easy to build (the M54 Trailhead model can be installed in two days or less, with no disruption to the golf course), look attractive, and can easily be positioned in the most remote locations on the course.

"The relatively simple and cost-effective nature of these units makes them a great fit for golf courses," says Brian Barry, a Senior Account Executive at Clivus Multrum. "They look great, function extremely well, and are ideal in remote locations, especially where usage is relatively



low. And, without a doubt, the odor-free aspect is also a major selling point. With solar-powered ventilation, odors are never an issue. These are clean, comfortable restroom facilities that even the most exclusive private clubs have been exceptionally pleased

The Trailhead M54 Model, which can be built with one or two stalls, can be customized with a variety of interior fixtures. It can also be custom-built to match existing decor and architectural elements that fit the motifs of the club. For example, exterior options with cedar planking, vinyl siding, pine board, stone, and many other options, are readily available. A single-stall M54 Trailhead model (as a complete package, base model) costs approximately \$23,000.00. A "decked-out" model, complete with a foam-flush toilet (one of the most popular upgrades), will run approximately \$35,000.00.

When it comes to maintenance. Clivus Multrum is also available to provide the necessary service to ensure the composting process is working correctly and the tank is emptied from time to time. Regular maintenance includes adding bulking mixture (pine shavings) and monitoring moisture content to ensure good composting conditions. When systems are used at their capacity, maintenance is required once per month. Clivus Multrum can either provide the maintenance service directly or through their network of subcontractors. However, many golf courses choose to do the relatively simple maintenance work themselves.

Interestingly, Clivus Multrum means "inclined chamber," which is really the "secret" behind the efficiency of the composting tank. The sloped design separates urine and feces. Once separated, the polyethylene chamber uses aerobic decomposition to slowly break

down the material into stable compounds that can, depending on health and environmental codes in your area, be used as fertilizer. No compost is removed from the tank before a year of use and it is often several years before any is taken from the compost tank.

Also, carbon dioxide and water vapor are the two main gases that are vented from the system. A continuously-running vent fan, which pulls air down through the toilet system and out the vent stack, ensures that the facility is completely odor free at all times. The M54 Trailhead does not require water.

In 2013 the Philadelphia Cricket Club became the first club to install the Clivus Multrum M54 Trailhead. And, not surprisingly, when other nearby clubs heard about the product - and how well it worked - others soon jumped on board. After visiting the Philly Cricket Club, the Whitemarsh Valley Country Club, Old York Road Country Club, and St. Davids Golf Club also realized that this system was the perfect solution to solving their lack of oncourse facilities "woes."

Tony Gustaitis, Superintendent at the Whitemarsh Valley Country Club, had been trying to resolve the "restroom" issue at his course for over 10 years. With easy access to the 2nd, 12th, and 16th holes, the M54 provided a comfortable "rest stop" for their 400 members. "I've only received positive feedback," says Gustaitis. "It's clean and bright and you never smell any kind of odor. I wouldn't hesitate to install another one in an area where we have no potable water or septic."

Not surprisingly, the "stories" at these courses - and at many other golf courses in North America that have installed the M54 – are very similar. In other words, porta potties - or, simply, just "the woods" - are not an adequate solution to an "issue" that will never go away. Yes, indeed, where there are people, there will be a need for restrooms. Or loos. Or Johns. Or whatever else you want to call them. May as well make them nice places for, well, "a rest." ■



Andrew Penner is a freelance writer and photographer based in Calgary, Alberta, Canada, His work has appeared in many leading golf publications throughout North America, including Golf Magazine, Golf Digest, The Golf Channel, Golf

Canada, and SCOREGolf Magazine. Contact Andrew at andpenner@shaw.ca

GOLF & TURF SOLUTIONS



GREENMAN GOLF & TURF SOLUTIONS TEL: (253) 333-3345 WEB: GREENMANGOLFTURF.COM

Markers' 2018 "Tee-it-up" promotion

Use Promo Code below for 15% or more discounts!

Course Hazard Markers - many styles

- 36 or 24" poles
- Push-in snikes metal or plastic, and/or ground sockets



SmartComb™ & SmoothMark™ Sandtrap Rakes

- Durable 1 piece rake heads
- Smoothline designed tines
 Available with 54" long-reach
- polysteel or honeycomb composite handles



Fairway Flush Yardage Markers

- Installs flush to fairway
- Easy to maintain
- Visible 30-40 ft. away
- Long lasting return on



Driving Range Signs with Frames

Complete Package

- Easy 37" x 21" slip-on 2 sided yellow sign
- Large 17" Tall Numbers
- Easy to assemble/install High Impact Frame with





MARKERS,

Avon Lake, OH 44012

VERSALINE

6mm Clad Aluminum Course Signs & Tee Markers

It's All About The Decals!

EASY to change messages and purpose Simply cover old decals with new



6" Round 5x10" Rectangle 5.5" Square





Need extra revenue? Add VERSALINE™ sponsor tee markers to golf outing packages

We can also do Custom Shapes!







We'd like to thank you, GC Trades readers, with a special offer on a great selection of MarkSmart™ products.

A - Visit our website and simply enter promo code "Tee-it-up" at checkout to receive a 15% discount on "selected" items.

www.markersinc.com

B - Prefer to speak to a salesperson? Give us a call and mention the promo code for your discount on qualified products.

Call TODAY! **1-800-969-5920**



COMPANY SPOTLIGHT



There Will be NO Porta-Johns in Heaven



You spend a fortune making your course heaven on earth, and yet you serve your customers porta-johns, or the only alternative that is worse – nothing. This impacts your prestige, your green fees, and the number of rounds sold. A recent survey reveals that a majority of both men and women consider on-course restrooms when deciding where to play. Convenient flush restrooms will become an even larger factor with the aging of the baby boomers.

restroom option without the owners having to tear up the turf and paving or spend a dime on installing utilities

HOW DO OUR SELF CONTAINED FLUSH RESTROOMS WORK?

Our restrooms are affordable, commercial quality, and built to last decades. They are delivered to the course fully ready for service and are installed on-course in just a few hours.

Customers will not notice anything that is different from what they see, smell, and experience in other

and experience in other quality flush restrooms because there are no differences. It's what they can't see that makes our restrooms special.

Below the floor is a large concrete vault that holds the sewage and has the capacity for thousands of uses. Water for flushing can be provided by connection to a potable waterline or an irrigation line. Where pressurized water is not available, the vault below the floor is partitioned to

accommodate a cistern for delivered water and/or collected rain water.

WHAT ABOUT MAINTENANCE COSTS?

On-course restrooms will need to have the sewage pumped out 2-4 times a year. This is often done under a contract with the same folks who pump out the porta-johns. The cost of this service amounts to



about 15 cents per restroom use which may be less than the cost of a porta-john rental. Where pressurized water is not available, water for the sinks and toilets can be delivered by a local water hauler, or by a water trailer with water from a remote tap on the course.

CUSTOMIZING TO YOUR NEEDS

Green Flush Technologies has several standard models to choose from or we can work with your architect to provide you exactly what you want. You choose the finishes and the features of your new restroom. From basic, to fully loaded, to extravagant, we can do it at the lowest possible price for a flush restroom installed on your course.

LET US BE YOUR RESTROOM PROBLEM SOLVER

We've all seen impressive clubhouse restrooms. Now imagine that kind of restroom impression being made where it will be really appreciated. A flush restroom experience on the course signals affluence and stature for the few that have it. Having one is a great way to separate from the other courses in the area that cannot offer the same. If you have considered adding a flush restroom on your course but couldn't find a way to make it feasible, we are here to be your flush restroom problem solver. Contact us today for more information and pricing.



greenflushrestrooms.com info@greenflushrestrooms.com (360) 718-7595



Why don't all up-scale golf courses have flush restrooms on the course like they do in the clubhouse? The answer is simple. They are too expensive to build. Paying for a new restroom building itself may be affordable. However, the cost of running utilities may be more than the restroom building.

Fortunately, Green Flush Technologies is providing golf courses with a fashionable, odorless flush

NEWS

From Around the Industry

For More News, Visit GolfCourseTrades.com

Greenworks Commercial Introduces New 82-Volt Stick Edger for Landscape Professionals



Greenworks Commercial, leaders in battery-powered outdoor equipment for landscaping, turf management and golf maintenance professionals, today announced that it has expanded its popular 82-volt system with a powerful new commercial-grade tool perfect for professional edging jobs in noise-sensitive areas - the GE 080 Stick Edger.

Like all of the tools included in Greenworks Commercial's family, the new GE 080 Stick Edger utilizes a proprietary Greenworks Commercial 82-volt lithium-ion battery to provide superior performance capable of handling the toughest edging jobs. The unit's 8" heat-treated blade is driven by a direct-drive brushless motor that provides high torque, zero-maintenance and zero-exhaust — all while reducing vibrations and noise. With its hasslefree "instant on" start switch and variable-speed trigger, the new GE 080 is quiet enough to allow landscape professionals to get their work days started earlier without bothering clients or violating local noise ordi-

The Greenworks Commercial 82-volt Stick Edger provides all the power and function landscape and turf management professionals need, utilizing the following key technologies:

- 8" Heat-Treated Steel Blade for commercial grade performance
- · Cast Steel Blade Guard for maximum safety and durability
- Direct-Drive Brushless motor to deliver more torque and longer life
- Variable speed trigger to help conserve battery life

In addition to eliminating the odors associated with gas-fueled tools, the GE 080 Stick Edger yields 50% less noise than gas equivalents, protecting workers' hearing while delivering equal power. Furthermore, it produces 5X less vibration than gas-powered competitors, reducing fatigue and extending the workday.

Finally, the push trigger start eliminates pull cords completely, making starting and stopping the tool safe, easy and convenient. In addition, it extends the battery's charge by eliminating unnecessary run-time on the job site.

"We are excited to continue to build on our award-winning 82-Volt system of outdoor power equipment, with new solutions for landscape and turf management professionals that encounter new noise and emission ordinances every day," said Chris Allen, President of Greenworks North America. "Like all of our tools in the 82-Volt system, the new Stick Edger provides users with high performance in an environmentally responsible way. The GE 080 is up to the toughest of edging tasks, so we're excited to see pros begin putting it to the test this Spring."

The Greenworks Commercial Stick Edger will be available through the Carswell, Conniff Sales and Steven Willand independent dealer networks, and SiteOne, beginning April 15th. For more information on the 82-volt Stick Edger and Greenworks Commercial's comprehensive selection of best-in-class, battery-powered outdoor equipment, visit http://greenworkscommercial.com.

PHILADELPHIA EQUIPMENT

PRE-OWNED GOLF COURSE **EQUIPMENT SALE!**



6 - 2006 Flex 21 1,800 - 2,200 hrs \$250 each



2007 Tru Turf Gas Roller \$3,000



2 - 2013 2500 eHybrid 3wd 1,000 - 1,300 hrs \$14,000 each



5 - 2013 7500 eHybrid 4wd 1,000 - 1,500 hrs \$22.000 each



2 - 2013 Tru Turf Electric Roller 520 hrs Charger included



3 - Toro Trans Pro 80 **Trailers**

\$250 each \$6,000 each



Loving the Season and the Setting at Cherokee Hills Golf Course

by Linda Parker

When John Carothers first learned about the opening for a golf course superintendent at Cherokee Hills Golf Course in Catoosa, Oklahoma, he asked one pivotal question, "You guys don't host any big tournaments, do

Previously, as an intern and then as assistant superintendent at Tulsa's prestigious, memberowned country club, Southern Hills, a host site for seven major championships, John had

Hard Rock Casino / Cherokee **Hills Golf Course**

Defined by tree-lined fairways, rolling slopes and dramatic elevation changes, Cherokee Hills is a friendly, but challenging course. Over the years, the hillside property has been known by multiple names, including Rolling Hills Country Club, Spunky Creek Golf Club and most recently, Indian Hills Golf Club. In the early 2000s, Cherokee Nation



Enterprises purchased Indian Hills and in 2003 dealt with the nitty-gritties that go along with hired Tripp Davis and Associates to refresh the course's 1924 Perry Maxwell design by creating complimentary new holes while remaining true to Maxwell's distinctive design tenets.

> The Cherokee Nation is recognized by the U.S. federal government as the governing body of the Cherokee people, and as such, it has sovereign status recognized by treaty and law.

it was one of the best decisions I ever made. I spent 18 months in the Persian Gulf during Desert Storm. Taught me that there are no excuses in life." John Carothers

"I served 6 years in the US

Navy. 1987-1993. I would say

Cherokee Nation Entertainment is the retail, gaming, entertainment, hospitality and cultural tourism entity of the Cherokee Nation.

Working at a course operated by Cherokee Nation Entertainment is a unique experience that comes with a few extra layers of accountability. John explains, "Regarding chemical applications, we follow State of Oklahoma guidelines, but our operations are overseen by the Cherokee Nation."

As part of Cherokee Nation Entertainment, John is expected to give qualified Cherokee applicants priority in hiring. As a result, approximately nine of his twelve winter crew members are of Cherokee heritage, a ratio that dips a little lower on his twenty-six-member summer crew, which includes more college students and short-term laborers.

"They take care of us well," says John. "They make it hard to leave, give us good job secu-

hosting both the 1996 Tour Championship and the 2001 US Open. Although some superintendents relish the challenges of hosting a high-visibility, high-profile event at their course, John values other aspects of the superintendent's job more.

Personable and family-focused, John enjoys the close-knit affability of the crew at Cherokee Hills which he describes as, "his second family." He is energized by seeing his team set goals and realize accomplishments. Most of all, John loves "the season," as the grass begins to grow, and he is inspired anew to produce a picture-perfect course where the playing conditions are nothing short of remarkable.

Although Cherokee Hills is a resort course, nearly forty percent of the 24,000 average annual rounds of golf played there are by members. The course's repeated appearances on Golfweek Magazine's lists of "Top 40 Casino/Resort Courses in the United States, "Top 5 Courses in Oklahoma," and "Best Courses You Can Play in Each State" attest to the standards this superintendent and his crew are able to sustain. While the busy resort sees plenty of fundraiser golf tournaments, best ball and scrambles for local charities, John describes these smaller, one-day events as "perfect" to suit him.



rity, good benefits and a great working environment, and we are like a family up here.

"The result is a stable, more mature crew. Of our twelve fulltime employees, seven have been on the job for more than six years, and four have been here over twelve years."

Turning in His Whistle

This year, John announced his retirement, but it's not from the job he loves as golf course superintendent. Instead, he is turning in his whistle as a girls' high school basketball coach. After ten years in coaching, he's ready for change.

A quick nine with John Carothers

Let's start with some basics:

- 1. Where did you go to school? Oklahoma State University
- 2. What or who led or inspired you to become a superintendent? Started working on a course when I was 15 during the summers. Worked on a couple of courses during my time in the US Navy. Once I was discharged, I came back home and went to OSU and made it a career.

And more about you:

- 3. Are you married, single or somewhere in-between? Been married to my lovely wife Kelli for 25 years.
- 4. Do you have children, and if so, how many? I have 3 girls. Haleigh 30, McKenzie 19, and Jayce 17. I also have a grandson
- 5. Do you have pets? We have 2 dogs. Moose, a yellow Lab, that works with me at the course and Lolo, a Jack Russell terrier. On the job:
- 6. What is your biggest challenge at your golf course? Finding enough summer help that wants to work. I'm sure I'm not the only one with this issue. The hot and humid summers in Tulsa, Oklahoma, aren't great either.
- 7. What do you love most about your job or your facility? The people. We have a great relationship with the golf shop, and my crew is like my second family.

Off the clock:

- 8. What's the best round of golf you ever played and where? Although it wasn't a great round of golf scoring wise, I'd have to say Cypress Point.
- 9. Next to golf and your family, what's your favorite way to spend your free time? I would say coaching high school girls' basketball, but I recently retired from the coaching ranks. I coached varsity girls, basketball and golf for 10 years. Now, that that's over, I'm sure I'll spend some time with my wife and enjoy some free time for a change. Maybe do some traveling.

"I served 6 years in the US Navy. 1987-1993. I would say it was one of the best decisions I ever made. I spent 18 months in the Persian Gulf during Desert Storm. Taught me that there are no excuses in life."

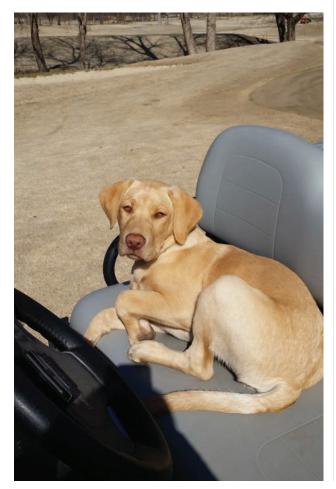
John Carothers



Change is also underway at Cherokee Hills. Twelve new 50-inch fans have been installed on the greens. A new underground pump station is being added, updating the 1940s and 50s infrastructure that carries water four miles from Bird Creek to the course. And soon, there will be new bridges across the property. In total, more than a half million dollars is allocated for these and other upgrades.

While some things change, other key details will remain exactly the same. The quietude of the native areas and woodlands will nurture resident deer, bobcats and foxes. Commitment and comradery will continue to define the Cherokee Hills maintenance crew.

John and his team will passionately continue to tackle each task, completing it with pride while enthusiastically seeking their next challenge. As John reminds us, "This is a special place, with special people, and I wouldn't consider leaving. Well, not for the next fifteen years, anyway. That will put me at sixty-six, and I'll think about it then."



Perry Maxwell "The Father of Oklahoma Golf"

Cherokee Hills is one of the many Perry Maxwell-designed golfing gems of the Great Plains. Maxwell, golf's low-profile, banker-turned-course-architect, is the designer who gave us Tulsa's Southern Hills, the rugged Prairie Dunes in Hutchinson, Kansas, and approximately seventy other exemplary courses built primarily in the southcentral U.S. between 1920 and 1950.

Maxwell was generations ahead of his time, architecting courses designed with the property's native vegetation and natural landscape in mind. He showcased rills, brooks, rock outcroppings and the terrains' natural elevations, minimizing the need to move excessive amounts of earth during construction, maximizing inherent drainage patterns and in general, creating courses that evolved out of the landscape rather than in spite of it. Drawing on his own Scottish heritage and his love of links-style golf, Maxwell created inland courses with a nod to elements of Scottish links design.

John Carothers has logged fifteen years as the superintendent at Cherokee Hills, seven more in various roles at Southern Hills, and four years as a crew member at Cushing Country Club, now known as Buffalo Rock Golf & Gun. The fact that each of these courses is a Perry Maxwell design underscores the scope of Maxwell's vast influence on Oklahoma golf. It also explains, in part, why John, who understands and appreciates Maxwell's approach, is so especially well-suited for his role at Cherokee Hills.



Linda Parker has been writing professionally since the 1980s. With clients in finance, sports, technology, change enablement, resorts and nonprofit global initiatives, Linda helps organizations communicate their stories in meaningful ways to the people they most want to reach. She has authored, ghostwritten or contributed to more than a dozen nonfiction books. Linda is a member of the Authors Guild and the Golf Writers Association of America. You can connect with



INDUSTRY INSIGHT

Netex Sport Netting

by Andrew Penner

It's a beautiful Saturday morning in mid-March and dozens of golfers are getting the rust off their game at the popular Golf Canada Calgary Centre driving range in Calgary, Alberta. Every second, or so, a loud "thwack!" reverberates throughout the facility. In an ideal world, all of those "thwacks" would signify a dead-solid-perfect shot. Every result would produce amazing distance, beautiful trajectory, and a ball flight as straight-as-an-arrow at the target. But, alas, the world isn't perfect. People - especially golfers! - have faults. And, not surprisingly, there are plenty of "foul balls." Enter a state-of-the-art netting system that offers protection and safety in the unpredictable, imperfect game we call "golf."

Interestingly, directly to the golfers' right at the Golf Canada driving range is the access road (where hundreds of vehicles pass by each day) and a large commercial landscape center. Without the netting system, which borders the entire right side of the range, hundreds of golf balls would be lost each day. And, no doubt, broken windshields and injuries would be a daily occurrence. Truth be told, without the netting, Golf Canada would not have a safe and viable 26 - GolfCourseTrades May 2018



business to operate. And rightly so. The city, the landscape center – and the general public! - would never accept or tolerate the danger and the risk.

Obviously, there are hundreds of golf courses and driving ranges in North America and throughout the world that are in a similar position. Install some sort of protective netting system...or don't open the doors. In this age of litigation and liability, it's a critical component for numerous golf operations where tight spaces, adjacent residential property, transportation corridors, and so on, enter into the equation.

However, as many courses have discovered, netting systems are not all created equal. Inferior materials and construction – including leaning poles, ripped netting, inadequate height, inability to withstand wind, and so on – have relegated many "protective" netting systems to unacceptable, poorly performing "eye sores."

Enter Netex Sport Netting Systems, the most technically-advanced sports netting systems in the world.







With over 20 years of experience in the sports netting industry (they also build and design netting products and systems for baseball, softball, soccer, and football), Netex has become one of the most trusted names in this niche industry. A few of their recent golf industry projects include a new driving range at the Metropolitan Golf Club in Australia, which will host the World Cup

of Golf in 2018, Royal Melbourne GC, which is the only course to host the President's Cup outside of the USA, and the Canterbury Golf Club in Cleveland, Ohio, which was founded in 1921. (The 100-foot netting system at the Golf Canada Calgary Center is also one of their projects.) Netex Sport Netting has also worked with Major League Baseball and is currently the

official netting provider for the Korean Professional Baseball League. One of their MLB projects was for the Anaheim Angels at Anheuser-Busch Stadium.

Inspired by over six generations in the fishing industry (ask any fisherman about the importance of a good net!), Netex – thanks to founder and President, Mark Wilson with 40 years of net-building experience – has developed the most effective, most attractive netting system in the golf industry.

Based in Delta, British Columbia, Canada, Netex systems have been installed at golf courses and driving ranges throughout the world. They currently have projects in Canada, USA, Australia, Korea, and Taiwan. And the verdict is always the same: they're durable, they perform exceptionally well, the installation is remarkably fast, and the cost savings, when compared to many other sports netting systems, can be substantial. And, another huge bonus, they are, from an aesthetic standpoint, the best in the business.

"Thanks to the strong, thin gauge, we've developed netting that is virtually invisible," says President, Mark Wilson. "After I've completely finished an installation I've had an owner standing on the tee deck ask me 'so when are you going to put up the netting?' Our nets are second to none in all aspects, including performance and visual appearance. Or lack thereof."

Continued on page 29 GOLFCOURSETRADES.COM - 27

Golf Course Trades → Supplier Directory

NEWLY REVISED & ENHANCED!

What you get:

- · Update your photos & promotions daily!
- Superintendents view in-depth information at a glance.
- Now with video available!
- Capture & engage with buyers INSTANTLY!

Why us? Why online?

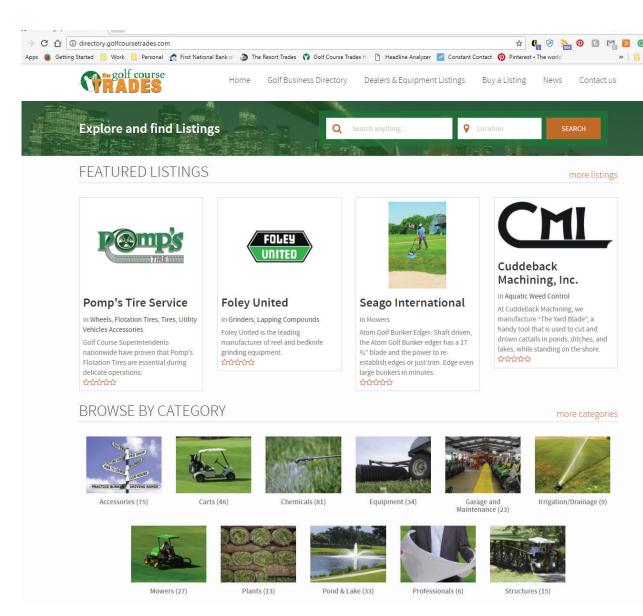
- Directory.GolfCourseTrades.com provides enhanced search engine optimization (SEO).
- The Trades' Digital Team socializes your presence online through strategic posting and boosting strategies.
- Directory.GolfCourseTrades.com reaches
 - enabled device they use.
- Links from Directory.GolfCourseTrades.com to your company website will multiply your opportunities to engage directly with customers!
- If your picture is worth 1,000 words, your videos could be worth a million! Directory.
 GolfCourseTrades.com enables the use of images and video to increase brand recognition and project the image you wish to convey.

4 Bonus Ideas:

- 1. Sign up for multiple categories to extend your
- 2. Ask us about our "Featured Listings".
- 3. Change your listing each month to test
- 4. Track multiple categories to test each one for
- 5. Remember, your message can reach a global audience

First Listing	\$125/month
Additional Listings	\$75/month
, talantierian Eleanige iiii	
DDEDAY FOR THE	VEAD & CAVE
PREPAY FOR THE	YEAR & SAVE
First Listing	\$1.200
3	- + - ,

Additional Listings\$750



CALL US TODAY! 931.484.8819

Our advertisers throughout the years have found that **The Golf Course Trades** works. We have maintained a loyal base of advertisers over the years, many of whom have been with

they get results.

We appreciate the lead generation that our advertising with you provides. It is also a pleasure to work with you "

Brandon Huber Repower Specialists Ltd.

Netex Sport Netting

Continued from page 27



Netex Sport Netting has developed an ultra-high molecular weight polyethymene netting called "Dyneema." "It is the lightest, most durable, moisture-resistant netting in the world," says Wilson. "I've had all my nets tested in wind tunnels and they perform incredibly well under stress. And with Dyneema we don't need as many poles on a project. A 300-yard driving range with Dyneema netting will only require 12 poles. However, that same range with regular netting will require 19 poles placed every 50 feet."

Obviously, this will reduce the overall cost of the installation. "Because of the reduced wind load on the Dyneema netting, we are able to have longer spans between poles," says Wilson. "And less material, especially when it comes to the expensive poles, makes a major difference. The Netex Dyneema boasts 42% less wind-load than my nearest competitor. Basically, the more wind-load on a net the more likely it can cause the net to collapse during heavy wind storms."

Without a doubt, the poles themselves can also play a key role in terms of the visual appeal and the quality of the finished product. And Netex has an exclusive business partnership with Valmont Poles, the largest producer of tapered steel poles in the world. The poles are galvanized on the interior and exterior as well as powder-coated over the galvanizing – a premier surface for harsh environments.

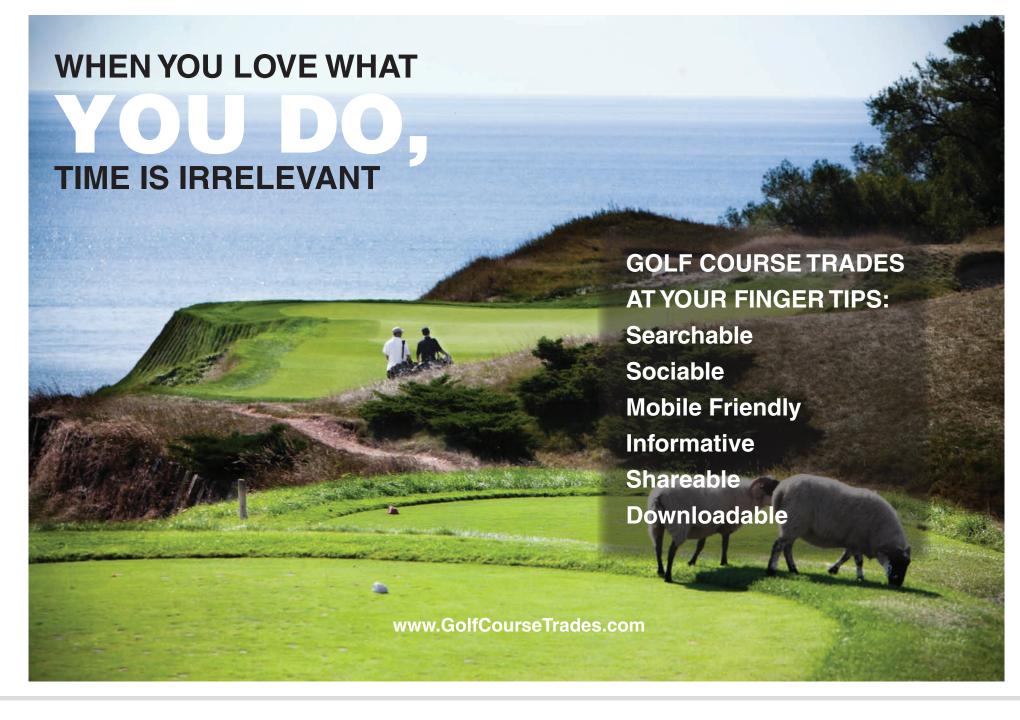
"From start to finish, our goal at Netex is to ensure every customer is completely satisfied with our service and the final product," says Wilson, who oversees every facet of the operation. "Obviously, time is of the essence when we're doing these installations. Golf course owners and managers are, rightfully, very concerned with the amount of time it takes to get a job done. I'm fully aware of this and have no issue working long hours and doing whatever it takes to get them back and running as soon as possible, often well before the stated completion date. As a business owner with over 20 years of experience, I take this very seriously and the courses I've worked for really appreciate this. Every day the business has to be closed can equate to thousands of dollars in lost revenue."

Thankfully, given the ability – or lack thereof! - of the average golfer to hit the ball "dead-solid-perfect" with any level of consistency, Netex Sport Netting will have a viable business for years to come. Yes, until we all have robots hitting golf shots for us, a state-of-the-art Netex system can come in very handy.



Andrew Penner is a freelance writer and photographer based in Calgary, Alberta, Canada. His work has appeared in many leading golf publications throughout North America, including Golf Magazine, Golf Digest, The Golf Channel, Golf Canada, and SCOREGolf Magazine. Contact Andrew at andpenner@shaw.ca





Maintenance budgets: What NOT to cut

by Jeff Langner



There's no denying the importance of course maintenance, but in today's market most super-intendents are faced with tightening budgets and have been forced to make tough decisions when it comes to maintenance costs. We all want to achieve the unattainable trifecta when it comes to maintenance: high quality results at a fast pace and a low cost, but ultimately something has to give – so when you're faced with a dwindling budget and nonnegotiable timing, how do you save as much quality as you can?

You've probably already worked your way through multiple lists of ways to cut back, and without a deep dive into your budget you can likely identify a few areas you're willing to scale back on – but these decisions can come with a significant risk. Making cuts to save money today could land you with an even bigger financial burden down the road. To help you with the balancing act, here are my insights into maintenance budgets; highlighting the key areas even the most creative of superintendents simply cannot compromise on and why.

Labor

It's natural instinct to reduce labor costs when your budget takes a hit; labor likely makes up the majority of your outgoing costs and trimming the fat, so to speak, can be a tempting approach. The biggest mistake you can make here is to eliminate staff that are engaged, motivated and most importantly experienced. Losing a skilled team member will have an immediate positive impact on your budget, but don't be convinced of the long-term benefit. When you start to look for a cheaper, less experienced employee you'll incur the costs associated with hiring and once you find a candidate, the lack of experience and dedication is likely to reduce efficiency and place unnecessary stress on your team, equipment and greens — all of

which play a role in draining your budget. Never underestimate the value of a well-trained, skilled and experienced workforce. So when the purse strings are pulled closed, the pressure is on and you're left with no choice but to reduce headcount, fight to protect your best team members even if they're not the cheapest – it makes financial sense.

Irrigation and Drainage

Water management can be a difficult and expensive challenge to tackle; this is particularly true for many courses that have suffered extended periods of drought recently – managing the damage and dealing with limited water availability, not to mention skyrocketing water costs, make an investment in a quality irrigation and drainage system an expensive necessity in today's climate.

More sprinklers and more efficient coverage not only result in better playing surfaces, they enable water and energy conservation allowing you to better manage long-term costs. If you've already made the investment in a reliable system, do not eliminate system maintenance from your budget – a pump house and sprinkler maintenance schedule should remain in place so you can proactively identify any issues before they impact your course.

Golf Course Trades →

NEWLY IMPROVED!

Now available online at Directory.GolfCourseTrades.com

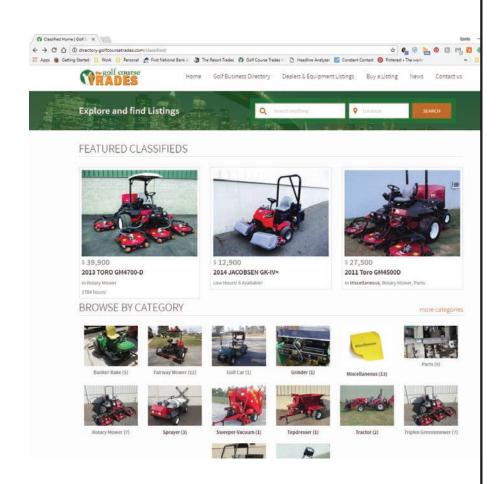
Golf Course Trades magazine has long been recognized as the Leader in helping sell new and used equipment. Now, we've

manufacturers, dealers, superintendents and others participate in the very active online marketplace! We are proud to bring you

Remember

- "Wow" them with photos that make your phone ring instantly.
- · Make changes and updates DAILY.
- Golf Course Trades' enhanced search engine optimization (SEO) expands your reach; your equipment becomes more
- Regardless the size of your company, your equipment will be
- Viewable on any Internet-enabled device including cell phones, tablets and desktops.
- Latest technology makes user-friendly functional usage.
- · Global reach includes Canada and Mexico.
- And more!

CALL US TODAY! 931.484.8819



First Listing\$10/month Prepay and Save\$100/year

CAN YOU AFFORD TO NOT BE ONLINE?



In addition to implementing regular checks, I implore you to review the products you're using to ensure they are complementing the work of your systems. Different approaches can impact the root zone to help or hurt your irrigation practices and ultimately your bottom line. Which brings me onto the next: product quality.

Product Quality

In any financially strained situation, brand loyalty is quick to go out the window – sometimes you just have to settle for the generic store brand version, but should the same apply to your course maintenance products?

First you have to ensure you understand how your products are impacting the rest of your maintenance requirements. For example, if you're using a ceramic topdressing mix, which creates porosity while also holding mixture in the root, you'll likely be saving money on hand watering, fertilizers and pesticides as a result of the ceramic mix profile. If you make a change for the sake of saving money on the product itself, you could be looking at steadily rising costs in other areas of your maintenance practice.

While it can be tempting to look for cheaper alternatives to some of the costly elements of your maintenance budget, it's critical to look at the trickle effect of those changes. Making a big cut to save money initially, could lead to even higher costs in the future. Understanding the areas that simply are not worth the compromise can help you adjust your priorities and set a maintenance budget that works for you.



Jeff Langner, Business Manager, Profile Products

An expert in golf and sports field construction, renovation and maintenance, Jeff is a sought-after speaker with over 11 years experience in the industry. Currently serving as Business Manager for Profile Products' Golf, Sports Field and Landscape business, Jeff is a recognized educator and industry committee member.

Golf Trades Trades Place





















Thinking of Removing Cores This Aerification Season?









- Only the original "CORE COLLECTOR" from Turf Pride offers:
- Savings on labor costs
- Attaches to walk behind and tractor drawn aerifiers
- Top dressing ahead of aerification
- saves even more time, hassle and protects greens from damage
- Available models to fit all major brands of aerifiers

NEW JERSEY

DOUBLE D TURF LLC

MONROE TWP., NJ

732-241-7378

www.doubledturf.com

MO/IA/KS/NE/IL
COMMERCIAL
TURF & TRACTOR

Chillicothe, MO 800-748-7497

www.commercialturfandtractor.com

(800)426-3634 • sales@turfprideusa.com • www.turfprideusa.com

We're always working for you, the Golf Course Superintendent! Our team of writers works diligently to bring you fresh ideas for you to enjoy.

Now we are asking for your help. The Golf Course Trades is your magazine and we would like your input.

What would you like to see more of in our magazine?

What are your biggest concerns for 2018?

If you have plans for a redesign or refurbishment, one of our writers will contact you and write your story.

Contact: golf@thetrades.com



Please Patronize these Friends of Golf Course Trades

Abell Turf & Tractor www.abellturfandtractor.com 36
Agrimetal, Inc. www.agrimetal.com34
AgSource Laboratories www.agsourcelaboratories.com 32
AirMax Fans www.airmaxfans.com 32
Aqua Ben Corporation www.aquaben.com5
Buffalo Turbine, LLC www.buffaloturbine.com 13
Country Club Landscaping www.usedturfequipment.com 14
Cuddeback Machining, Inc. www.cuddebackmachining.com 32
Cutter Equipment www.cutteronline.com 18,19
CXT Inc./Precast Products Div www.cxtinc.com
Dakota Peat & Equipment www.dakotapeat.com2
Divots, Inc. www.divotssand.com
Eastern Industries, Inc. www.thehovermower.com 32
Foley United www.foleyunited.com 8
Futures Golf Equipment www.futuresgolfequipment.com 4
Global Turf Equipment www.globalturfequipment.com 3
Greenleaf Technologies www.turbodrop.com
Greenman Golf & Turf Solutions www.greenmangolfturf.com 21
Harper Industries www.harperindustries.com 32
Head Edger, Inc. www.headedger.com32
Jerry Pate Turf & Irrigation, Inc. www.preowned.jerrypate.com 12
John Deere Company www.johndeere.com
Markers, Inc. www.markersinc.com21
Mat Incorporated www.matinc.biz
Outdoor Water Solutions www.outdoorwatersolutions.com 34
Philadelphia Equipment www.philacricket.com 23
Pomp's Tire Service www.pompstire.com
Porous Pave

www.porouspaveinc.com 2

Repower Specialists, Ltd. www.repowerspecialists.com	7
Reynolds Farm Equipment www.reynoldsfarmequipment.com	26
Schaeffer's Fuel Additives www.schaefferoil.com	27
Turf Pride, LLC www.turfprideusa.com 32,	,33
Turf Pride, LLC - Trion www.turfprideusa.com	9
TurfTime Equipment www.TurfTimeEq.com	32
UGATE Store www.ugatestore.com	29
US Turf, Lawn & Landscape	
Equipment www.usturfequipment.com	17
Wesco Turf Incorporated www.wescopreowned.com	35
WW Sod & Equipment, Co. www.expressreel.com	20
Wxline LLC www.wxline.com	32

GREENS ROLLER



- 6" diam. drive rollers provide maximum traction and efficiency in morning dew condition.
- Honda 13 HP motor with electric start combines years of reliability with ease of maintenance.
- The #80 chain drive system provides ease of operation with minimum care.
- Lights are standard feature on both models.

AgriMetal

www.agrimetal.com

1006, Principale street, Wickham, Quebec, Canada, J0C 1S0 tel.: 1-819-398-6883, 1-888-398-6883, service@agrimetal.com



No Electricity Required!

- Multiple Sizes
 Available
- 5 Year Pump & Motor Warranty
- Easy Installation
- State of the Art Technology
- Solar Bottom
 Diffused Aeration
 Also Available

Solar Powered Fountains

www.outdoorwatersolutions.com







For over 30 years, Wesco Turf, Inc. has been the golf & grounds equipment and irrigation leader in Florida and Southern Georgia as well as a worldwide provider of quality pre-owned golf course and turf equipment.



2013 Toro Reelmaster 5510 11 Blade DPA Cutting Units - Power Rear Roller Brushes - 2009 Hours \$24,900



2013 Salsco HP11 Greens Roller Trailer Included 507 Hours \$8,700



2014 Toro Workman HDX Auto **Hand Throttle** 636 Hours \$14,900



2015 Club Car Carryall 550 Turf Trim Package - Tail Brakelight Package - White Canopy - 1542 Hours



2013 Toro Multi Pro 5800 Pro Control - Pro Marking Kit - Elec. Hose Reel & Spray Gun - 1548 Hours \$29,900



2013 Toro Sand Pro 2020 Tooth Rake - Manual Blade Spring Rake - Lights - 3335 Hours \$6,500



2015 Toro Pro Force Blower Wireless Remote 1328 Hours \$5,700



2012 Toro Groundsmaster 3500 **Bimini Canopy** 2063 Hours \$15,900



2013 Toro Groundsmaster 360 72" Rear Discharge Deck Road Light Kit - 4WD - 1443 Hours \$15,600

*Free freight promo applies to retail orders received before 8/1/18 shipped within the continental United States

Free Freight on any Fairway Mower or Walking Greens Mower!*

Worldwide Shipping - 90 Day Warranty - Over 500 Items in Stock - New Items Weekly 888-245-4063 • preowned@wescoturf.com • preowned.wescoturf.com

Ready... Willing... Abell Turf and Tractor





Toro 3300 T to choose, 2015 models with under 1000 hrs!



Toro 3040 Sand Pro, Front
Plow , rear rake, new
engine



Toro 5800 Multipro Sprayer with low hours!



Toro MH-400 with Wireless Mint condition!



Late Model Toro 3100-D's -- 8 to choose!



Club Car Turf 2's, refurbished... 20 to choose.



Kubota L3200HST Tractor, 300 hrs!



John Deere 2030 Pro Gator, 2WD, refurbished!



Toro 648 Aerator with new engine, fully refurbished



Late model AR-522 with Low hours!



Late Model Toro 1250 Sprayers... fully refurbished



Foley 632 grinder... never used!!

PARTS SPECIAL!

John Deere 1200A Carb -- \$155
Best Starter prices around... Call to check pricing

John Deere Aercore 800 lift actuator direct replacement!!! Only \$325 each! Plug and play

Progressive Pro Flex PTO shafts complete!! Replaces # 521738 ... \$560 plus shipping!

Progressive Pro Flex 120 complete blade sets!! Replaces # 522374 and 522372... \$85 plus shipping per set!

Pro Gator Radiator Fans!! Replaces# AM129853... \$175.00 plus shipping!



Late model Toro 5510's, some with 4WD

Seats for Sale! only \$100 ea + shipping

Fit's any Jacobsen, John Deere, or Toro machine and utility vehicle in the mfg.'s color (grey or yellow)

Abell Turf Rents!

Toro 648's, Toro 1298 w/tractor, Fairway Verticutters, Material Handlers, Greens Rollers...and much much more!

Call for details!



Arag Sprayer Valves -- for Toro, Jacobsen John Deere Sprayers! Much cheaper than OEM.

TWO LOCATIONS TO SERVE!

Canton, GA • Loxahatchee, FL

Call Franklin Abell

(678) 296-0822

fabell@abellturf.com

All major brands available
We ship worldwide
60 Day warranty on all purchases