AFFORDABILITY.

It's captured inside an efficient green granule.

By working better and longer, POLYON® Controlled-Release Fertilizers can help you get a grip on your budget. Our patented coatings enable POLYON to feed your turfgrass gradually and consistently, all season long, with just one application.

POLYON's highly efficient plant uptake even allows you to apply less Nitrogen per year and still get stunning results. Whether you need a 12-week or a 12-month product, we have a POLYON fertilizer that's perfect for you. Our promise is to exceed your expectations, not your budget.

Ask your Harrell's or BEST[®] Fertilizer representative about our exclusive POLYGRAPH[®] nutrient prediction software that lets you customize a program for your course.

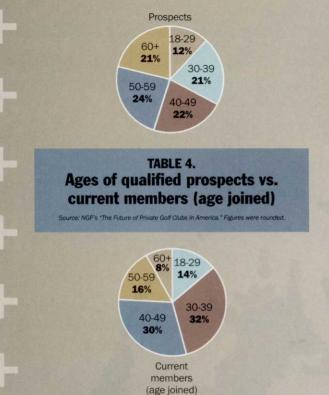


POLYON fertilizer suppliers: Harrell's: 800.282.8007 | BEST: 800.992.6066

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THE FUTURE OF PRIVATE CLUBS





Manhattan, Kan., is offering new terms for "junior executives;" younger people can join at a reduced rate until age 50. Does that bother existing members? Not really, he says.

"We have an astute group of members who recognize times are changing," Gourlay says. "You can get 0 percent financing on some automobiles for up to 10 years right now. If you bought your car three years ago, you couldn't have done that. We have to adapt to the market."

Market conditions affect how The Territory in Duncan, Okla., operates, too. The Territory's located in the Southwest part of the state – 80 miles from Oklahoma City and 160 miles from Dallas. It's a 4-year-old private club that plans to allow outside play until it reaches 450 members. Its biggest challenge in attracting members is price.

"The facilities in this area have never been successful with initiation fees or dues structures," says Tim Johnson, director of operations, who points to the area's blue-collar-dominated job market as one reason. "Ours is one of the nicest facilities within 100 miles. Where we don't compete with other clubs on price, we compete with perception. Everything around here is undervalued or underpriced. You can get into a lot of clubs for a \$100 administration fee."

Instead of lowering its \$8,000 initiation fee, The Territory is offering interest-free financing. Until January, the club required \$4,000 down and allowed financing at 1 percent above prime. Now the club's offering a flexible payment plan. Members can take up to eight years to pay their initiation fees

Improve Playability



When precision irrigation decisions count, the FieldScout TDR 300 offers the tools to eliminate the guesswork. Based on proven time-domain measurement technology, these portable units accurately measure soil moisture across the full range of soil moisture conditions.



12360 S. Industrial Dr. East Plainfield, Illinois 60585 Toll Free: 800 248 8873 Email: info@specmeters.com CALL TODAY! REQUEST YOUR FREE BULLETIN

ENTITLED "INTELLIGENT IRRIGATION"

USED AT THE

Visit us online at www.specmeters.com



GOLF WATERING PRODUCTS 2009 CATALOG



golf sprinkler nozzles page 2-3 testing page 4-5 hose nozzles page 6-7 hose applicators page 8-9 hose sprinklers page 10-11 is sprinklers & accessories page 12-13 drip irrigation page 14 water hand pumps page 15

Products that work...smart.™

bra



Underhill

An industry leader in innovative watering products for golf courses all over the world, Underhill brings 30 years of know-how in developing our inventory of "Products that work...smart.[™]"

golf sprinkler nozzles

Profile™

SOLID METAL GOLF SPRINKLER NOZZLES

Upgrade your Toro[®] or Rain Bird[®] sprinklers with our perfect-fit Profile[™] nozzles and you will see improved results immediately. Water distribution so uniform that you can cut back watering times to **save millions** of gallons of water **every year**. Over time, since Profile solid metal nozzles resist wear and clogging, you'll enjoy these superior results for the life of your sprinkler...never needing to change out nozzles again.

Call us to request our free video on Profile solid metal golf sprinkler nozzles! Or watch it online at www.underhill.us



- Cut watering times significantly
- No more worn out / clogged plastic nozzles
- Eliminate wet and dry spots
- Improve course playability
- Stop wasting water

Test your sprinkler uniformity with CatchCan Pro[™]. Easy-to-use and highly accurate measuring system.

"We've had Profile nozzles in for about two years now with outstanding results and excellent water savings. We're way past break-even on ROI." "...consistently uniform distribution. The nozzles perform the same today as when we first installed them."

See Page 4

2

Products that work...smart.™

	 -	- @
Profile nozzles for	or	O

1.0				
Ì	730 SERIES	Full Circle: Front/Rea	ar No	zzle Set
J	Part #	Nozzle Color # range / spreader		Toro Nozzle
IJ	T730-3313	Brown 33 / Gray 13		33
1	T730-3413	Blue 34 / Gray 13		34
[T730-3515	Violet 35 / Red 15		
	T730-3515L (50 psi)	Green 35 / Red 15*		35
	T730-3615	Red 36 / Red 15*		36
	T730-3617	Red 36 / Lavender 17		

* For square spacing, specify #17 (lavender) nozzle with the #35 and #36 range nozzles

Toro Nozzle #s 33 34

760 and 860 SERIES

Part Circle	: Midrange/Close-in Nozzle Set
Part #	Nozzle Color: midrange / close-in
T760-GY	Gray / Yellow
T860-Gy	Gray / Yellow

830 and 834S SERIES

Full Circle:	Midrange/Close-in Nozzle Set	
Part #	Nozzle Color: midrange / close-in	Toro Series
T830-GY	Gray / Yellow	830
T834-GY	Gray / Yellow	834S

835S SERIES Full Circle: Midrange/Close-in Nozzle Set Part # Nozzle Color: midrange / close-in T835S-WP White / Plug

630 SERIES CALL FOR AVAILABILITY



670 SERIES Full Circle: Rear Nozzles Part # Nozzle Color: midrange / close-in T670-BY Black / Yellow



690 SERIES Full Circle: Rear Nozzle Part # Nozzle Color: spreader T690-G Gray

RIES Full Circle: Front/Rear Nozzle Set	
Nozzle Color # range / spreader	Toro Nozzle #s
Red 56 / Lavender 17	56
Gray 57 / Lavender 17	57
	Nozzle Color # range / spreader Red 56 / Lavender 17

780 and 854S SERIES Midrange/Close-in Nozzle Set Part Circle (780) and Full Circle (854S) Part # Nozzle Color: midrange / close-in Toro Series T780-BY Black / Yellow 780 T854-BY Black / Yellow 854S

855S SERIES Full Circle: Midrange/Close-in Nozzle Set Part # Nozzle Color: midrange / close-in T855S-PP Pink / Plug

650 SERIES CALL FOR AVAILABILITY

11⁄4"	Pro
I 74 INLET	E
	Ful
6	Par
No.	R7
Nº D	R7

ofile nozzles for Rain Bird®

AGLE 700 SERIES

I Circle: Midrange/Close-in Nozzles

2	Part #	Nozzle Color midrange / close-in	Rain Bird Nozzle #s
ř	R70028-RG	Blue / Gray	28
)	R70032-RG	Red / Gray	32
	R7003640-GG	Blue / Gray	36/40 and larger

Our NEW low-angle 12° wind-fighting spreader nozzle delivers exceptional close-in uniformity for all Eagle 700 series sprinklers on either triangular or square spacing.

900 EAGLE SERIES

Full Circle: Close-in Nozzle Part # Nozzle Color R900-M Maroon

91 SERIES BRASS IMPACTS

Full Circle: Close-in Nozzle Part # Nozzle Color R91-G Gray

51 SERIES BRASS IMPACTS

Full Circle: Front/Rear Nozzles

2	Part #	Nozzle Color # range / spreader	Rain Bird Nozzle #s	
	R51-1411.5	White 14 / Gray 11.5	14/11.5	
	R51-1611.5	Blue 16 / Gray 11.5	16/11.5	
	R51-1811.5	Yellow 18 / Gray 11.5	18/11.5	
	R51-2011.5	Red 20 / Gray 11.5	20/11.5	
	R51-2213	Green 22 / Black 13	22/13	
	R51-2413	Black 24 / Black 13	24/13	

All original equipment manufacturers, names and products presented in this publication are used for identification purposes only, and we are in no way implying that any of our products are original equipment parts. Toro® is a registered trademark of the Toro Company, Rain Bird® is a registered trademark of the Rain Bird Sprinkler Manufacturing Corporation.



11/2"

CatchCan Pro[™]

SPRINKLER PERFORMANCE TESTING SYSTEM

Stop overwatering and save! Poorly performing sprinklers often go unnoticed as watering times are gradually increased to compensate. Catch them in the act - accurately measure sprinkler application rates with the Underhill[™] CatchCan Pro[™] system.

features

- · Self standing, easily anchors into turf
 - Tripod design works on slopes
 - · Measures sprinkler application in inches, centimeters and milliliters
 - Unique design allows for shorter duration test
 - Made of durable polypropylene engineered plastic
 - · Can be stacked for easy storage
 - · Each 10 pack kit comes with instructions.





ordering Part # CCPK-10

CatchCan-Pro[™] 10-pack (includes directions)



HeadChecker[™]

NOZZLE DISCHARGE PRESSURE GAUGE

HeadChecker[™] combines a solid brass Pitot tube and a liquid-filled 160 psi gauge to create a handy tool for measuring nozzle discharge pressure. Assuring correct pressures is essential to maintaining highly uniform irrigation systems. The 160 psi gauge can also be used separately to measure pipeline pressure.

ordering

Part # A-HCGPK Part # A-HCP

HeadChecker[™] 160 psi gauge and Pitot tube Part # A-PG160L Pressure gauge only Pitot tube only

TurfSpy™

EARLY STRESS DETECTION GLASSES

Disease, drought and weed invasion are plant and turf killers. But by the time you see them it can be too late. TurfSpy™ glasses, with stress detection technology developed by NASA, lets you "see into the future" to identify problems 2-10 days before they are visible to your naked eye. Keep your turf and vegetation healthy BEFORE serious problems arise.

features

- · Shatterproof/polycarbonate stress detection lens (ANSI approved safety lens)
- · Wrap-around lens limits ambient light for optimal detection
- · Sports frame with adjustable ear piece
- · Lightweight case included



fusarium patch

pythium blight

yellow patch (rhizoctonia)

brown patch

anthracnose

get a jump on broken or poor-performing sprinklers

highly efficient **spot** watering saves time and labor costs

poa grass invasion identified BEFORE it takes over

superior **weed location** and spraying saves time and money



HOW IT WORKS

Dying vegetation absorbs and reflects sunlight differently then when its healthy. The earliest signals occur at the outer limits of the human visual spectrum, and are rendered invisible compared to the predominant middle wavelengths. TurfSpy[™] filters the light in the center so that fringe spectra, which show early plant stress, become visible.



Part # NG655-01 TurfSpy™ Glasses and Deluxe Case

Magnum™

SOLID METAL HOSE NOZZLE

Underhill[™] Magnum[™] contains no plastic internal parts to break, stick or wear out. Our unique ratchet mechanism easily adjusts from gentle fan to powerful jet stream and prevents over-tightening damage. Precision-machined, incredibly smooth operation and outstanding distribution patterns make it ideal for high-demand areas like greens and tees. Magnum[™] is also an excellent equipment wash-down nozzle.

features

- Built for 1" and 3/4" flow rates
- Fire hose quality nozzle feels great in your hands
- · Ultra-durable construction withstands any abuse
- Solid metal internal no plastic parts to break or wear out
- · Beautiful, consistent spray patterns for life
- Ratchet mechanism prevents over-tightening damage
- Multi-pattern sprays effortless control with hydraulic assist on/off



specifications

Materials: stainless steel, aluminum, TPR rubber Flow: 37 GPM at 80 psi Inlet: 3/4" hose thread (1" brass adapter available, see Page 7)

CoolPro[™]

Cool Without Over Watering - No Root Damage

A hot summer day can be murder on your greens. Use too much water and you risk damage to the roots. CoolPro[™] is the first nozzle specifically designed for the single purpose of lightly misting the turf canopy to cool without over watering. And its 25 foot fogging pattern gets the job done quickly.

features

- 3/4" inlet (1" brass adapter available, see Page 7)
- Ergonomic handle/valve provides easy grip and variable on/off control.
- Durable solid metal design: zinc, aircraft aluminum and stainless steel.
- Patented Precision[™] nozzle fogs at 70 psi to deliver a 25 ft. pattern with only 4-6 GPM

ordering

Part # NG450 Part # HNC075 MAGNUM[™] Hose Nozzle CoolPro[™] Hose Nozzle



Magnum[™] nozzle pictured with 1" brass adapter (sold

separately on Page 7)

solid metal internal body Won't stick...won't break

Perfect for tournament play, CoolPro[™] puts down only enough water to cool the turf canopy. It prevents wilting while maintaining good ball speed. CoolPro is a great tool for protecting grass on hot days without damaging roots.

an

Precision[™]

PATTERNS SO REMARKABLE, NOZZLES SO GOOD ... THEY'RE PATENTED.

It's hard to beat MAGNUM[™] for all around versatility...When you have more precise watering needs, you simply cannot buy a better nozzle than the Underhill Precision[™] series. These solid metal, fixed spray hose nozzles deliver millions of soft, uniform droplets to provide rapid yet surprisingly gentle water application over a huge range of flow rates. From watering fragile seed beds to drenching dry spots, Precision spray patterns are designed with ideal flow rates and droplet sizes to offer you the ultimate solution for every hand watering application.



Rainbow[™] LOW FLOW RATE

LANDSCAPING, LIGHT WATERING Ideal for watering greens, tees and seed beds. Excels at lower pressure flows. **15 GPM @ 80 psi.**



Rainmaker[™] LOW TO MEDIUM FLOW SYRINGE AND SPOT WATERING Perfect for syringing and gentle watering of turf and landscape at lower pressures. 23 GPM @ 80 psi.



Cloudburst[™] MEDIUM TO HIGH FLOW DRY SPOT SPECIALIST High volume drenching, syringing, and application of wetting agent. Ideal flow rate for 3/4" and 1" hoses. **48 GPM @ 80 psi.**



Cyclone[™]

HIGH FLOW RATE HEAVY WATERING, SOAKING Powerful fan-shaped spray covers a HUGE area, and gets heavy watering jobs done quickly. Ideal flow rate for 1" hoses. 50+GPM @ 80 psi.

GPM will vary with pressure at nozzle.

high-flow valves

COMPOSITE / STAINLESS STEEL

3/4" hose thread inlet/outlet

oversized handle

• up to 55 GPM



SOLID BRASS

- 3/4" hose thread inlet/outlet
- up to 50 GPM

hose adapters / quick-connectors



ordering

Part # HN1500 Part # HN2300 Part # HN4800 Part # HN5000

Part # CV075H Part # A-BV77FM Part # A-BA107FM Part # A-BA107MF Part # A-BQ7M Part # A-BQ7F Part # HN075W Precision[™] Rainbow[™] Hose Nozzle Precision[™] Rainmaker[™] Hose Nozzle Precision[™] Cloudburst[™] Hose Nozzle Precision[™] Cyclone[™] Hose Nozzle

High-Flow 3/4" Valve - Brass High-Flow 3/4" Valve - Composite/Steel 1" FHT x 3/4" MHT Brass Hose Adapter 1" MHT x 3/4" FHT Brass Hose Adapter 3/4" Quick-Connect, male end 3/4" Quick-Connect, female end replacement washer, 3/4" hose



7

PelletPro[™]

APPLICATOR GUN FOR SOLID WETTING AGENT TABLETS

We outfitted our heavy-duty surfactant applicator with a high-flow composite/stainless steel valve and a Precision[™] Cloudburst[™] nozzle to produce the finest wetting agent gun available. The PelletPro[™] accepts all wetting agent tablets and is designed to provide powerful, yet ultra-soft spray when watering or applying surfactants to tight, hydrophobic soils.

features

- 48 GPM capability gets the job done faster!
- Ultra Heavy-Duty brass fittings, aircraft aluminum, stainless steel, and precision engineered glass-filled materials
- Patented Precision[™] Cloudburst[™] nozzle delivers large droplets in an outstanding fan pattern
- · Pellet rotation (1 RPS) evenly dissolves/applies tablets

RF

With the included 1" FHT x 3/4" MHT brass adapter, PelletProTM works with both 3/4" and 1" hoses.

2 products in 1!

Remove the PelletPro[™] bowl and you have a superb syringe nozzle combo: the patented, 48 GPM Precision[™] Cloudburst[™] with our high-flow, oversized handle valve. PelletPro[™] rotates pellets at 1 revolution per second (RPS) to evenly dissolve/ apply wetting agent



PelletPro's bowl, also sold individually, works perfectly as a replacement in-line filter bowl for most spray rigs. Heavy-duty, transparent plastic shows fluids. (No more cracked bowls during winter storage!)

8

-

ordering

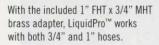
Part # A-PPWA50K Part # A-PPB Part # A-PPBG

PelletPro[™] Applicator Gun In-line Filter Bowl Gasket

LiquidPro™

APPLICATOR GUN FOR LIQUID WETTING AGENT

This popular "liquid" version of the PelletPro[™] features the proven combination of our Precision[™] Cloudburst[™] nozzle and the high-flow composite/stainless steel valve. Adding a chemical-resistant, UV-protected, lightweight siphon/mixing system produces an applicator gun which can cover 1000 square feet in less than a minute. Now, with unmatched speed and uniformity, you can virtually "paint" your turf with liquid wetting agent, fertilizers, and micronutrients. And like the PelletPro, LiquidPro disassembles easily to create the Cloudburst[™] High-Flow Valve syringe nozzle.



2 products in 1!

The Precision[™] Cloudburst[™] nozzle

and high-flow valve can be quickly

assembled to create a powerful, 48

GPM syringe nozzle.

ONADIMON

features

- Patented Precision[™] Cloudburst[™] nozzle evenly distributes wetting agent ensuring uniform coverage. Made of aircraft aluminum and stainless steel.
- Lightweight, durable nylon construction weighs only 3 lbs., UV-protected and chemical resistant.
- High-density polybottle has full quart capacity with easy-to-read measurements in fluid ounces and milliliters.
- Needle Valve Metering Chamber: Engineered venturi siphon mixes proper amount of wetting agent into the water flow.
- Pistol grip design with textured handle provides sure grip surface and reduces operator fatigue.
- Adjustable metering dial offers 10 additive settings including "Water Only."
- Metering dial can be removed to prevent tampering with a predetermined setting.



a real time saver!

Bring plenty of wetting agent, fertilizers, and micronutrients to the field all at once with our 6-pack of polybottles.

ordering

Part # A-LPWA50K - LiquidPro[™] Applicator Gun Part # A-LPWAB-6 - 6-Pack of 32 oz. Polybottles and Carrier

9

RollerPro[™]

PORTABLE SPRINKLER BASE

The 22" wide stainless steel roller of RollerPro[™] provides a stable field position for supplemental watering. Designed for years of hard use, it is ideal for watering dry spots and newly seeded areas.

features

- 22" wide stainless steel roller is weighted to prevent movement during use.
- Standard 1" FHT inlet x 1" female NPT outlet.
- 3/4" inlet and outlet adapters included.

RollerPro[™] works with both 1" and 3/4" hoses and sprinklers using the included adapters. Sprinklers sold separately on page 12-13.

ordering Part # A-RP221

Order with

rass swivel for extra savings! RollerPro™

HoseTap™

SOLID METAL HOSE ADAPTER

HoseTap[™] gives you a hose connection anywhere you have a Toro[®] or Rain Bird[®] electric, valve-in-head sprinkler...ideal for fast connections when quick-couplers or hose bibs are not available. Aircraft aluminum body won't break or wear out like plastic, and is anodized with color for easy sprinkler manufacturer identification. Each HoseTap[™] includes the precision metal disc, o-ring, and riser. Brass swivels sold separately (see Page 12).

ordering

Part # HN-T100 - HoseTap[™] for Toro[®] 1" inlet golf sprinklers Part # HN-T150 - HoseTap[™] for Toro[®] 1-1/2" inlet golf sprinklers Part # HN-R125 - HoseTap[™] for Rain Bird[®] Eagle 700 Series golf sprinklers Add "B" to part numbers to specify BSP thread. Add "S" to part numbers to include 1" brass swivel for combination savings.

REPLACEMENT O-RINGS

 Part # OR-100
 Fits Toro® 1" inlet and Rain Bird® Eagle 700 Series golf sprinklers / HoseTap

 Part # OR-T150
 Fits Toro® 1-1/2" inlet golf sprinklers / HoseTap

Tracker[™]

PORTABLE IRRIGATION MACHINE

The Tracker[™] offers a very economical solution for supplementing seasonal watering needs of 1/4 acre to 2 acre areas. Ideal for irrigation of roughs, fairways, driving ranges and other areas where underground irrigation is unavailable. Built to last with precision German engineering and high quality materials, this portable powerhouse can irrigate an area the size of a football field in just two passes.

Tracker[™] requires minimal labor to operate. Powered by water, it pulls itself along a nylon cable, dragging up to 360 ft. of 1" reinforced heavy-duty hose (sold separately). Each pass irrigates about 2/3 acre per 8 hours of operations.

specifications

- Weight: 58 lbs.
- Size: Length 33", Width 22", Height 22"
- Materials: Aluminum, Brass, ABS
- Hose Required: 1"
- Minimum Water Pressure: 50 psi

Precision German engineering, high



features

- Adjustable Speed Control: 20-70 ft./hr.
- 360 ft. nylon cable provides maximum irrigated length of 400 ft.
- Standard full or part circle sprinkler (8-15 GPM)
- 70-85 ft. pass width
- Automatic shut-off at end of pass
- · Galvanized anchor stake
- Water turbine drive and gear box
- · Includes 1" brass guick-connect adapter



quality components...built to last!

Use Tracker[™] to help areas where an irrigation system is not available. Tracker's maximum 400 ft. irrigation path makes it practical for large areas and its compact size allows it to operate in narrow spaces such as in between trees.

ordering Tracker[™] Portable Irrigation Machine

Part # T-400

one-piece quick coupler valves and valve keys can help you get your Tracker[™] set up quickly.

Solid brass

See Pages 12-13



Quick Coupler Valves & Keys

SOLID BRASS, SINGLE SLOT/LUG ESSENTIALS

Built to last, Underhill valves and keys are constructed of solid red brass and stainless steel. Valves incorporate rugged one-piece design.



Valve: Part # QV-075R (3/4" FPT inlet)

Kev: Part # QK-075 (3/4" MPT x 1/2" FPT outlet)



Valve: Part # QV-100R (1" FPT inlet)

Key: Part # QK-100 (1" MPT x 3/4" FPT outlet)



Valve: Part # QV-150R (1-1/2" FPT inlet)

Kev: Part # QK-150 (1-1/2" MPT x 1-1/4" FPT outlet)



hose swivels

Part # HS-075 3/4" FPT x 3/4" MHT outlet Part # HS-100 1" FPT x 3/4" MHT outlet Part # HS-101 1" FPT x 1" MHT outlet Part # HS-151 1-1/2" FPT x 1" MHT outlet

The Claw[™]

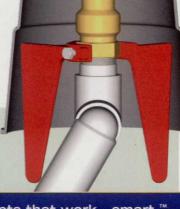
QUICK COUPLER MOTION RESTRAINT

When quick coupler valves become unscrewed from swing joints, it's more than just a hassle - it can be dangerous. The Claw[™], new from Underhill, offers a simple solution. Embedded in the soil below the quick coupler, and then securely attached to its base. The Claw provides significant resistance to rotational, vertical and horizontal motion, preventing the valve from moving. Made from high strength ductile iron, this compact anchor attaches easily with a single steel bolt.

ordering

Part # QCA-075100 The Claw[™] for 3/4" and 1" valves Part # 0CA-150 The Claw[™] for 1-1/2" valves

EASY RETROFIT Installs without removing valve or valve box!



The Claw[™] pictured with 1" quick coupler, key and hose swivel.

Impact Sprinklers

SOLID BRASS, ULTRA-RELIABLE WORKHORSES

For reliable, trouble-free, high-performance year after year, you just can't beat our brass impact sprinklers. Available in full circle and full/part circle, in inlet sizes of 3/4", 1" and 1-1/4".

features

- · Solid brass construction
- · Stainless steel drive spring
- · Bearing assembly hood for longer wear life
- · Chemical resistant bearing seals
- Solid brass nozzle



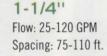
Flow: 5-15 GPM Spacing: 40-60 ft.



111 Flow: 15-45 GPM Spacing: 50-80 ft.

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			(MATH)
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			Mar V

Underhill's SI100F 1" inlet brass impact atop the portable base RollerPro™ (see page 10) puts a powerful sprinkler anywhere you can run a hose.



	GPM	Radius (ft.)
3/4" MPT Full Circle Sprinkler	13	57
3/4" MPT Part/Full Circle Sprinkler	11	48
1" MPT Full Circle Sprinkler	23	71
1" MPT Part/Full Circle Sprinkler	23	71
1-1/4" MPT Full Circle Sprinkler	51	96
1-1/4" MPT Part/Full Circle Sprinkler	54	78
	3/4" MPT Part/Full Circle Sprinkler 1" MPT Full Circle Sprinkler 1" MPT Part/Full Circle Sprinkler 1-1/4" MPT Full Circle Sprinkler	3/4" MPT Full Circle Sprinkler133/4" MPT Part/Full Circle Sprinkler111" MPT Full Circle Sprinkler231" MPT Part/Full Circle Sprinkler231-1/4" MPT Full Circle Sprinkler51

Performance data shown at 80 psi. GPM and radius will vary with pressure at sprinkler

VersaLid

UNIVERSAL REPLACEMENT LID FOR ALL VALVE BOXES

VersaLid[™] is the easy solution for broken or missing valve box lids. No need to guess what brand a buried box is or even worse - dig it up to find out - VersaLid's locking system fits all 6"-7" round valve boxes.



features

- Stepped locking system
- T-Top design minimizes dirt in valve box
- Fits all 6"-7" round boxes
- · Interchangeable, easy to install
- · Greater top-load strength and more UV-resistant than structural foam lids

VersaLid[™] 6"-7" valve box lid

ordering

Part # VL-6

drip irrigation

DeepDrip™

TREE WATERING STAKES

DeepDrip[™] stakes allow you to water and fertilize your trees at the roots, encouraging deeper roots and healthier trees. Water gets underground fast, so you can water for shorter periods and enjoy considerable water conservation. They also help to aerate the soil with oxygen, and you can add fertilizer into the shaft to direct nutrients to the root zone.





THREE LENGTHS FOR USE WITH ALL TREE SIZES

DeepDrip comes in three sizes, each designed for use with automatic landscape drip systems or a hose. The 14.5" unit is ideal for small trees and shrubs with shallow roots, like rose bushes and ornamental trees (or in commercial use for boxed trees), The 24.5" stake is best for most other tree varieties except for palms and similarly





deeper rooted trees, which will benefit from the longer 36" stakes.

BUILT SMART - AND EASY TO USE

The DeepDrip's reinforced tip and cap are made from ABS and the upper shaft is made from Schedule 40 PVC. Multiple holes in the bottom half of the spike, internally covered by a mesh filter, allow water to flow out but keep dirt from getting in and clogging the tube. The UV-protected cap acts as a reinforced cover when pounding the stake into the ground, keeps debris from entering the shaft and holds a 1/4" drip line/emitter securely in place. By inserting a screwdriver through the two holes at the top of the upper shaft, stakes can be easily pulled up to remove/ reposition or rotated to deter root invasion.

DeepDrip[™] watering stakes can be installed during or after tree planting. Once in, you have instant access to the root system for fertilizer delivery or to set up deep automatic drip watering.

ordering

Part # A-DD14 Part # A-DD24 Part # A-DD36

DeepDrip[™] 14.5" watering stake DeepDrip[™] 24.5" watering stake DeepDrip[™] 36" watering stake





MicroEase™

MICRO-IRRIGATION KITS

Convert your current, inefficient irrigation into a highly effective, low-maintenance, water-saving drip system. MicroEase[™] kits can connect to a water faucet, existing sprinkler system or 1/2" riser, providing efficient, low volume irrigation ideal for clubhouse surrounds and other landscaping, shrubbery and planter areas.

ordering

Part # ME-SS-PK Part # ME-8SS-PK Part # ME-SS-SCK Part # ME-8SS-SCK

MicroEase[™] Pro Kit: spray spikes (25) MicroEase[™] Pro Kit: 8-stream spikes (25) MicroEase[™] Conversion Kit: spray spikes (9) MicroEase[™] Conversion Kit: 8-stream spikes (9)



PRO KIT (faucet connection)

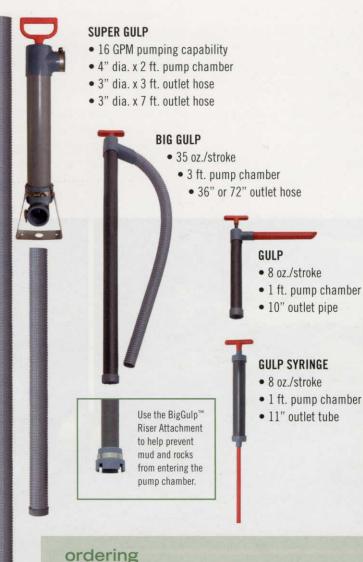


CONVERSION KIT (sprinkler/riser connection)

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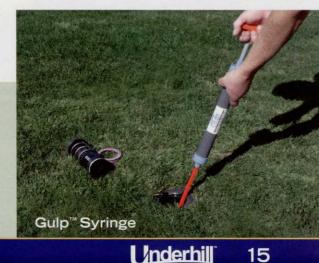
Part # A-G12 Part # A-G12S Part # A-G3636K Part # A-G3672K Part # A-G2484 Part # A-G01

Gulp™ Gulp[™] Syringe BigGulp[™] with 36" outlet hose BigGulp[™] with 72" outlet hose SuperGulp[™] with 84" outlet hose BigGulp[™] Riser Attachment









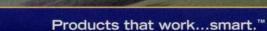
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Irrigation

TABLE 5. Demographics of members vs. qualified prospects

	Existing members	Qualified prospects*
Average age	55	45
Average household income	\$124,000	\$142,000
Average rounds	53	27
% with children who play golf	14%	19%
% with spouse/partner who plays golf	53%	46%
% who spouse whose very interested in golf	37%	26%

*Those who express a high interest in joining, have incomes greater than \$100,000 and are between ages 30 and 60. Source: NGF's "The Future of Private Golf Clubs in America"

- the only requirement is they pay \$1,000 per year.

"It hasn't been a problem with the existing members, which is surprising," says Johnson who understands some members' concerns about new initiation fee structures because he's been a member at an equityowned club. "But we haven't had one issue or complaint. Because we're in a rural area and we don't have the luxury of having a half-million people to draw from, members understand."

OTHER MEMBERSHIP OPTIONS

When markets get competitive, it's common for a variety of membership categories to sprout up – junior, senior, social and/or dining memberships are common options.

Short-term trial memberships, sometimes billed as "summer memberships," allow prospects to use the facilities and interact with fellow members before making a full commitment, according to the NCA's new book, "Membership Marketing: Best Practices for Private Clubs."

Trial memberships are a way to get prospects in the door, Vizza says. Typically, trial members pay only monthly dues until their terms are up, at which time they're responsible for the initiation fees.

"NCA recommends that trial members should still be vetted as would regular members to ensure that they are compatible with the club's existing membership," the book says. Junior memberships – discounts or special offers for those in their 20s, 30s and sometimes 40s – aren't new, but some facilities are reviving or retooling them, as clubs try to focus on the future. Seeing young professionals and families as the future of a club is a natural instinct; however, the NGF research shows that today's qualified prospects are more spread out among age groups than current members were when they joined clubs (see Table 4 on page 42). Sixty-four percent of current members joined in their 30s or 40s, while prospects are well divided between the 30s, 40s, 50s and 60-plus age group.

At some clubs, new discounts, membership options and financing offers make junior memberships a moot point. For example, The Territory has an option for twentysomethings to put half of the initiation fee down and pay off the rest by age 30. It's still available, but the eight-year, interest-free financing option for full membership is just as attractive – if not more so – so not many people are opting for junior memberships.

One reason some clubs hesitate to offer too good of a deal to younger members is the fear they'll create a class of members with little commitment to the club.

John Schoellner, CGCS, CCM, is one of them. The general manager for Estero Country Club in Fort Myers, Fla., doesn't advocate junior memberships – especially for facilities with steady rounds. "Why should somebody come in, pay less money and take a tee time?" he says. "I've always been amazed at clubs that give a senior discount without having the senior give up any benefits. They play more golf than anyone."



Schoellner

Schoellner recalls the experience of another club in his area that attracted a number of members through a junior campaign.

"The first time they had to dip into their pockets and come up with some money for repairs, they left," says Schoellner, adding that about 85 percent of Estero Country Club's 325 golf members are retired. "There's no commitment. There's a better deal down the street, so off they go."

Rather than simply lowering fees, Schoellner prefers to have members who enter under different terms give up a benefit. For example, the club's initiation fee is \$47,000, and typically members get back 20 percent when they leave. He's experimenting with an option of a \$25,000 initiation fee – all of which is nonrefundable.

"That way the club doesn't have that debt to pay members," Schoellner says, noting some clubs have run out of cash and have had to suspend their refunds anyway. "If that happens, you end up with unhappy people. It's better to tell them up front." GCI

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ARE UPPER-CRUST CLUBS IMMUNE?

Although some high-end facilities remain insulated, even the most upscale private clubs are finding they aren't immune to economic hardships.

> By Heather Wood Taylor



he Country Club at Castle Pines planned to renovate its driving range, but the project was put on hold. Marshall Fearing, superintendent of the scenic, upscale private club in Castle Rock, Colo., says the club trimmed its overall budget as a precaution and the renovation project was

a casualty.

Castle Pines attracts members from throughout the country – in fact, two-thirds of its members hail from out of state. The club doesn't open until the end of this month, so in the meantime Fearing monitors other clubs to gain an inkling of what might transpire through this year. "What we're seeing with some of the other clubs is a drop in revenue of anywhere from 10 to 15 percent," he says. "The general manager and the president made a decision that we'd make a 10-percent, across-the-board cut with everything

to be a little more preemptive."

As some clubs with wealthy memberships are finding out – though talking about money problems might be passé – even these individuals aren't immune to the tough economic times. In fact, 74 percent of people worth \$1 million to \$10 million say they're concerned about the downturn, according to a study by Elite Traveler/ Prince & Associates. While families around the nation fret about stretching their dollars, the wealthy are cutting back on their expenses, too. This act of fiscal restraint sometimes includes private golf club memberships. And while some clubs will continue to enjoy financial stability and a steady membership, others will discover that, like their members, they're not immune to the economic crisis.

"High-end clubs do tend to be more isolated from the ups and downs of economic cycles, but even they can't keep themselves totally out of the cycles," says Jim Riscigno, founder of consulting firm Club Specialists Intl. and former ClubCorp executive vice president.

Why else would the Golf Club of Cape Cod in Massachusetts, which opened two years ago with an \$85,000 initiation fee, begin accepting "affiliated" members who don't have to pay the fee for three years, as The New York Times reported last month?

Not only are individual members contributing to a decline, but cash-strapped corporations are having an impact, as well. "During downturns, companies restructure the business and the member-ship is one of the first things to go – it's among the luxury items that they don't need," Riscigno says.

VIEW FROM THE TOP

While some upscale club members feel the pinch, it's a different story at the very top. Of those worth more than \$30 million, only 13 percent harbor worries about the economic climate, according to the Elite Traveler/Prince & Associates survey.

One exception might be those who were defrauded by disgraced New York financier Bernard Madoff's massive Ponzi scheme,

Golf Course Communities Adjust

Golf courses built as part of a housing development also are experiencing a decline, but they're a different animal compared to other golf clubs, says Lewis Goodkin, real-estate and financial advisor from Goodkin Consulting.

"Golf course properties are a little different because of the rapid increase in property values, so they're more out of whack," Goodkin says. "We see adjustments in pricing downward."

Still, those prices will be pretty high compared to the average home price because they were so inflated to begin with and the market is not yet to the point of desperation, he adds.

"If they had been a half or a third of the price of what they were, they're still impressive," he says.

Some club communities are seeing decreasing membership because their members are aging. They're dealing with decreasing funds by making membership at the club mandatory. A board must vote on the move, and while it doesn't always pass unanimously, the idea has been approved in many communities, Goodkin says.

The golf course communities that might have some trouble are the ones that are being built now, he says.

"It's a tough time to be coming into the market with a new community," he says. "Depending on when they bought the land and what the numbers are going to be, it's not likely you're going to see any momentum in the market. " says Jim Koppenhaver, president of Pellucid Corp., a Buffalo Grove, Ill.-based golf-industry research and marketing firm. "We know that certain clubs have been affected by incidents such as the Madoff scandal – higher ends, more Jewish-based clubs in New York, Boston and Maine – but, overall, we're not seeing any meltdown at the top end of the food chain relative to the overall hit the private club sector is taking in membership losses," he says. "While they're insulated, they're not exempt from the current belt-tightening and repricing of American goods and services."

Club membership tracking is a research area the industry lacks, partly because of the sensitive nature of the information, Koppenhaver adds.

One affected club is the Palm Beach (Fla.) Country Club, which Madoff joined in 1996, according to a story in The New York Times in December. At least a third of the 300 or so club members had invested with Madoff, the Times said; typically, investors needed at least \$1 million to approach him.

The several high-end clubs touched by the scandal are the exceptions, says Lewis Goodkin, real-estate and financial advisor from Miami-based Goodkin Consulting. "Those clubs can't help but be affected," he said. "Most of the desirable clubs will remain insulated for the most part."

One reason the wealthiest club members might not be gung-ho about club membership is because it could be perceived as unfashionable in this climate to flaunt your good fortune. Companies are becoming more aware of public perception, says Tim Moraghan, consultant with Long Valley, N.J.-based Aspire Golf. "You don't want to see financial people playing golf when they should be looking after a portfolio," he says.

THE WAY DOWN

After the stock market tumble of 1929, the number of private clubs in the U.S. diminished by about one-third, according to "The Future of Private Golf Clubs in America" report conducted by the National Golf Foundation last year. But, by many accounts, the current recession has not reached Great Depression status. Still, some clubs struggle for one reason or another; Moraghan has received more notices of clubs closing than normal. While some are due to the economy, some are closing because of poor management and the inability to adapt to a changing market. (See "Staying afloat," page 30).

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THE FUTURE OF PRIVATE CLUBS

DEALING with the DOWNTURN

The Club Managers Association of America has an online resource page with several articles and other information about ways to deal with a down economy. The articles outline trends during past economic rough patches and the information helps clubs set up a master plan to make sure they're are on the right track financially. To learn more, visit http://www.cmaa.org/template. aspx?id=23588. Riscigno predicts the recession will force some clubs to close, but not at such a dramatic rate as seen the 1930s. Instead, it's plausible that some clubs will go from private to semiprivate status, from semiprivate to semipublic and semipublic to all out public, he says.

Some high-end courses will attempt different cost-cutting measures to stay afloat during these tough times, but if they cut prices and services too deep, they'll inadvertently lower their status in the community, Riscigno warns. The key is striking a balance between reducing operating costs and retaining the high-end persona.

Clubs also may fail to protect talented staff, Riscigno says, adding it's a dangerous move, especially if some clubs opt to cut the general manager position. "Who would think it's a good idea to have a club that's run without someone who knows the business?" he asks. "Having a part-time board run the club probably isn't a good idea. Running a club is extremely labor-intensive and it focuses on high-end, intangible services. When you put all those together, you've got to know what you're doing. It's a fairly sophisticated job."

The club is like a second home to members, and letting them control the financial decisions puts them too close to the situation and leads to emotional decisions, Riscigno adds.

Aside from people, a club's most valuable asset is its golf course. And it makes no sense to cut investment to the feature that generates revenue, Moraghan says. Clubs looking to eliminate something out of the budget should find other areas to cut before setting their sights on their golf courses, he says.

It can be difficult to cut from other areas because members have come to expect the finer items and services. "All the excesses that have come into our industry, such as maintenance practices, design philosophies and extravagant clubhouses, which seemed to be in excess in the late 1990s, all of a sudden have become the norm," Moraghan says. "Now it's one of those where if it's the norm for people, how do you ask people to cut back?"

You shouldn't, Riscigno says. "Make certain you don't compromise the membership offering," he says. "You can tweak pricing, but make sure when times get better this isn't going to hurt the club."

Clubs left with no other options but to cut from their courses need to make smart decisions. "One thing I learned from championship golf when I worked with the USGA is that you're going to be remembered for your putting greens," Moraghan says. "Fifty percent of the game is played on the putting surface."

RECESSION PROTECTION

Clubs keeping their budgets in check and maintaining a reserve fund are poised to deal with a downturn. Take Oak Hill Country Club in Rochester, N.Y., as an example. The club has always operated in a fiscally conservative manner, says Eric Rule, who has been general manager at the club for 24 years. "We would be in good position to weather an economic storm," he says.

The club, which has hosted all of the major men's championships over the past 25 years, has a waiting list of hopeful members and hasn't experienced a decline in light of the current economy.

"Oak Hill is affordable for an upscale club," Rule says. "I think our membership appreciates that and we haven't seen any attrition at all."

It helps that Rochester is more insulated from the recession than other regions.

"Housing has been very affordable for many years," Rule says. "We have seen some hardship in the area, but it hasn't been on par with the rest of the country."

Whatever the circumstances of the region, the clubs who planned ahead stand to come out of the chaos in the best condition.

"The clubs that set out and wrote a strategic plan two to three years ago, put the right governance plan in place and have the right manager, are going to do well and beat the odds," Riscigno says. "They're still going to have a downturn, though. Those who sat fat, dumb and happy thinking everything is wonderful, not thinking about deficiencies, not worrying about the board being involved in day-to-day operations – those are the clubs that will be in extreme jeopardy."

Customer service is another tool to overcome the forces hurting club membership.

"In any type of business, it's all about service," Fearing says. "We try to do as good of a job as we can down here. I think the entire staff does an excellent job. With us being a national club, why would someone come in from out of state to our golf course? It's got to be service. You've got to make it a special place to come." GCI

Heather Wood Taylor is a freelance writer based in Lakewood, Ohio.