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.



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

2 products in 1!

The Precision[™] Cloudburst[™] nozzle

and high-flow valve can be quickly

assembled to create a powerful, 48

GPM syringe nozzle.

ordening

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

Underhill 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 brass 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 Add "S75" to part numbers to include 3/4" brass swivel

REPLACEMENT O-RINGS

Part # 0R-100

Part # 0R-150

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

50 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. It is also ideal for irrigating athletic fields, cemeteries, golf course roughs, or other large areas where an underground system is impractical. Built to last with precision German engineering and high quality materials, this portable powerhouse can irrigate an entire football field in just two passes.

specifications

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

Mirage[™]

HUGE THROW, HIGH-PERFORMANCE LARGE TURF SPRINKLERS Underhill Mirage pop-up turf sprinklers, featuring precision German engineering and huge throws, can be installed completely outside the playing area of sports fields.

M-160: With its powerful **174 ft. throw radius**, the Mirage[™] M-160 is a worldwide favorite for sports fields, golf driving ranges and other large area turf or dust control applications.

M-125: A very impressive long-throw sprinkler in its own right with a **125 ft. radius**, the M-125 is perfect for installation in the out-of-play areas of large turf fields.

M-115: For areas where irrigation must be installed within the playing area, the M-115's deep sod cup cover holds a 9" (220 mm) diameter section of natural grass to "disappear" when not in use, staying out of the way of athletes and mowers.



YOU PICK THE CONTROLLER...WE CAN MAKE IT 2WIRE!

Underhill[™] decoder modules can convert controllers to 2-wire operation - with no field grounding and no special wire - so you can use your favorite clock to lower the cost and simplify the installation of your next irrigation project. Control up to 48 stations with a single module. More affordable than what you are using now (save a ton on wiring costs alone!), easier to use, and ultra-reliable (15 years and 150,000+ field successes).

CALL FOR DETAILS!

ordering Part # T-400 Tracl

<u>Fracker</u>

Tracker[™] Portable Irrigation Machine



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) Key: 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) Key: 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-075100The Claw™ for 3/4" and 1" valvesPart # QCA-150The 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



| ordering | | GPM | Radius (ft.) |
|---------------|---------------------------------------|-----|--------------|
| Part # SI075F | 3/4" MPT Full Circle Sprinkler | 13 | 57 |
| Part # SI075P | 3/4" MPT Part/Full Circle Sprinkler | 11 | 48 |
| Part # SI100F | 1" MPT Full Circle Sprinkler | 23 | 71 |
| Part # SI100P | 1" MPT Part/Full Circle Sprinkler | 23 | 71 |
| Part # SI125F | 1-1/4" MPT Full Circle Sprinkler | 51 | 96 |
| Part # SI125P | 1-1/4" MPT Part/Full Circle Sprinkler | 54 | 78 |

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



VersaLid[™]

VALVE BOX UNIVERSAL REPLACEMENT LID

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
- Fits all 6"-7" round boxes
- Interchangeable, easy to install
- Greater top-load strength and more UV-resistant than structural foam lids

1.0

Flow: 15-45 GPM

Spacing: 50-80 ft.



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.

1-1/4" Flow: 25-120 GPM Spacing: 75-110 ft.



Splice Kit

DIRECT BURY SPLICE KIT

Developed by 3M Company, each kit includes a single wire connector which can accommodate wire sizes from 18-10 gauge, and a waterproof gel case. Excellent for golf, commercial and residential applications.

ordering

Part # VL-6

Part # DBRY-4 Direct Bury Splice Kit - 4 Pack VersaLid[™] 6"-7" valve box lid









NEW! SuperKey™

MULTI-PURPOSE GOLF SPRINKLER TOOL

This ultimate multi-purpose tool designed for Rain Bird[®], Toro[®] and John Deere[®] golf sprinklers is a must have. Made of stainless steel and composite material, it effortlessly turns Electric-Valve-In-Heads on and off, removes internal assembly snap rings and performs many other sprinkler maintenance chores.



ordering Part # A-SKR Part # A-SKT

SuperKey[™] for Rain Bird[®] golf sprinklers SuperKey[™] for Toro[®] and John Deere[®] golf sprinklers

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.



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 tree varieties except for palms and other deeper rooted trees, which will benefit from the longer 36" stakes.

ordering

Part # A-DD14 Part # A-DD24 Part # A-DD36 DeepDrip™ 14.5" watering stake DeepDrip™ 24.5" watering stake DeepDrip™ 36" watering stake

NEW! Gulp[™] Ultra Pumps

HIGH-CAPCITY WATER REMOVAL SUCTION PUMPS

Whether you need to remove water from sprinklers and valve boxes or displace gallons of standing water in the field, the Underhill Gulp[™] Ultra series of water removal hand pumps has the right tool for the job. Constructed from heavy-duty, corrosion-proof materials, these pumps are self-priming and easy to clean. The Gulp Syringe[™] Ultra and Gulp[™] Ultra are ideal for carrying on maintenance carts for small, routine needs. For larger water removal jobs, BigGulp[™] Ultra can pump well over a gallon of water in only three strokes!

special features

- Extra Volume Pump Capacity
- Easy cleaning twist-off inlet and exit caps
 Replacement Wiper Seal and Bottom Check
- Valve (Big Gulp/Gulp)
- Dual Wiper Seal (Replaceable)
- Extra Strength Pump Tube Material
- Stainless Steel Pump Shaft
- Self Priming

BIG GULP ULTRA

- 47 oz./stroke
- 36" clear pump chamber
- 72" or 36" x 1-1/2" outlet hose



GULP ULTRA

- 12 oz./stroke
- 12" clear pump chamber
- 24" outlet hose

GULP SYRINGE ULTRA

- 12 oz./stroke
- 12" clear pump chamber



6" spike holds hose in place during pumping

Gulp[™] Classic

GULP

- 8 oz./stroke
- 12" pump chamber
- 10" outlet pipe

GULP SYRINGE

- 8 oz./stroke
- 12" pump chamber

SUPER GULP

- 16 GPM pumping capability
- 4" dia. x 2 ft. pump chamber
- 3" dia. x 3 ft. outlet hose
- 3" dia. x 7 ft. inlet hose



• 72" or 36" outlet hose

Use the BigGulp™ Riser Attachment to help prevent mud and rocks from entering the pump chamber.

ordering

GULP ULTRA SERIES Part # A-G12-C Gulp[™] Ultra Part # A-G12S-CK Gulp[™] Syringe Ultra Part # A-G3636CK BigGulp[™] Ultra with 36" outlet hose Part # A-G3672CK BigGulp[™] Ultra with 72" outlet hose

GULP CLASSIC SERIES

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| Part # A-G12 | Gulp™ |
|-----------------|---|
| art # A-G12S | Gulp™ Syringe |
| art # A-G3636K | BigGulp [™] with 36" outlet hose |
| Part # A-G3672K | BigGulp [™] with 72" outlet hose |
| Part # A-G2484 | SuperGulp [™] with 84" outlet hose |
| Part # A-G01 | BigGulp [™] Riser Attachment |
| | |

Underhill 15



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UNDERHILL INTERNATIONAL WATERING PRODUCTS 2010











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Continued from page 30

gest will tell you after receiving hate mail for preaching the cause of better practices, this has become a politically sensitive issue.

Part of the problem is generational. Your residents of The Villages, who have book shelves stocked with Tom Brokaw books, also love their Arnold Palmer, their palm trees and yes, dark green grass. Their offspring, the dreaded baby boomers, want all of the above plus greens Stimping fast and cut twice a day, if possible. And then you have the white belt-wearing generation, slugging away with the latest \$400 hockey sticks. They've been raised to respect carbon footprints and don't think twice about saving their plastic water bottles for the recycling bin. And the tie that binds them all together into a mass of unforgiving golfers who aren't ready for brown turf and native areas?

High-definition television.

It was rumored and even stated publicly by one USGA staffer that Hyler went so far as to ask NBC to remove green grass-friendly filters from the TV cameras for this year's U.S. Open.

"Absolutely not," Hyler told me just minutes after his first U.S. Open press conference at Pebble Beach. Hyler went on to say he doesn't even know if such filters exist and that he would never go that far with his voluntary role as president. Besides, the good folks at Pebble Beach were already amazing stewards and had the golf course looking well maintained, but certainly on the lean side.

Still, Hyler sent a message at the press conference that was not heard by most golfers.

"You will not see a golf course this week that's brown," he told a packed house of writers who were more interested in the announcement of future venues, including the linksy Erin Hills. "Our goal is to provide firm and fast conditions for the championship using careful irrigation management. It's important to remember here at Pebble Beach that the grass is primarily Poa annua and perennial ryegrass. And if that grass were to get brown, it would be dead."

Yet, if you talked to any golfers after the championship, that's all they saw. Brown. Dead. Bad.



The first indication I had that the USGA needs to initiate a massive marketing campaign came at this year's Players Championship at TPC Sawgrass, where superintendent Tom Vlach had the greens absolutely perfect despite a brutal winter and cool spring. And, admittedly, the turf looked awful and the ball did bounce a bunch by the time leaders rolled around during the early evening, especially when viewed on a 1080-line television compared with half of that on standard-definition televisions.

For weeks after, all golfers could say when I mentioned having been to the Players? "What was with those greens?"

The same questions have dogged me and surely many others since the U.S. Open at Pebble Beach. The excessive peanut gallery chatter even prompted an online essay by the USGA's Pat Gross titled, "Beauty Is In the Eye Of the Beholder."

"The U.S. Open is not about cosmetics," Gross wrote. "It's about providing a challenging and rigorous test to identify the best player. Producing a cosmetically attractive golf course would have been the easy task: a little more water, a touch of fertilizer, and we would have had green, pretty putting greens and soft *Continued on page 50* Given the public's negative reaction to the U.S. Open, it may be time for the USGA to re-imagine how it pushes for more "green" golf courses.



Join the Clubs!

^{CC}SonicSolutions is a major component of our pond management strategy. For the past several years our irrigation pond has stayed algae free. SonicSolutions has helped us obtain certification status with the Audubon Cooperative Sanctuary Program.²³

Matt Ceplo, Superintendent Rockland Country Club, NY

^{CC}Within a week or two after start up, the algae in the pond died. Since then, the pond has remained algae free. It is now the cleanest of our six ponds without the use of any chemical algaecides.²²

Michael Jr. Rohwer, Superintendent Shadowridge Country Club, CA

^{CC}I installed the SonicSolutions units when my ponds already had algae in them. I was completely surprised how quickly they killed the algae and lowered my chlorophyll levels!²²

Gonzalo Vargas Coco Beach Golf Resort, Puerto Rico

Controls Algae With Ultrasonic Waves!

-Green Solution - No chemicals

- Low maintance Simple to use
- Environmentally safe
- = Safe for fish, plants, or other aquatic life
- Solar available!
- Ask us about our 3-Month Rental Demo!



1-866-KO-ALGAE (1-866-562-5423) sonicsolutionsllc.com



Continued from page 49 conditions, but that was not the goal."

Such a statement by Hyler or Gross on television might have helped. But with all due respect to the men in navy blue, most viewers leave the room when NBC gives us those contractually obligated chats. The words need to come from a variety of sources, starting with better informed announcers and supplemented with clever ad campaigns like the relentlessly overplayed spot featuring a young man who makes a hole-inone that is only witnessed by the oldest living and latest working course maintenance worker in America. Considering the ad was filmed years ago and the young man is in college, maybe it's time to freshen up the branding.

And what better excuse to move in some fun, short and very sweet messages that help the public understand what "green" golf means. More urgently, these ads need to be about costs. Just the kind of thing the old money types at the USGA dread, since after all, they are in the business of governing the game, not the bottom line.

Yet, the majority of golfers will only listen if they can find something relatable in a message about brown golf. Superintendents all over the country who have crunched numbers on native area conversions or presented cost/benefit analyses of reduced water usage can tell you there's nothing like showing people a bottom-line savings.

In other words, the USGA and its Green Section needs to ramp up its investment in grants to researchers developing new grasses or give cash away to show who can show a correlation between sustainable practices and cost reduction. Unfortunately, Hyler takes over a USGA with a lot less money to play with and a gutted grants program.

But one budget that hasn't been slashed is the marketing dough. And right now the fight to save the game and provide a foundation for its future in America means convincing golfers there will be long-term financial benefits to sustainable practices passed along to them. Because it's all about them, as the last few months likely have proved to Hyler and the USGA folks who are pursuing a noble cause.

Geoff Shackelford is a long-time contributing editor to Golfdom and author of the magazine's back-page column, Shack Attack.