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Green Section RECORD

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I certify that the statements made by me are correct and complete.

Robert Sommers, *Managing Editor*

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USGA Green Section Record Index

Volume 15, Number 1, 1977 through Volume 29, Number 6, 1991

It has been 15 years since the last Green Section Record index was published. During that time, the magazine has published hundreds of popular and scientific articles dealing with turfgrass management and golf course maintenance. To aid in the use of the index, the following list of subject categories has been prepared. Twenty-three major subject areas have been identified. In some instances, the subject has been sub-divided into specific topics. The articles in each category are listed chronologically and include the name of the author, the year, the volume, the number, and the pages where they can be found in the Green Section Record. Certain articles have been referenced in several categories where appropriate.

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 Using Environmental Regulations to Your Advantage
 Golf Course Construction: A Rip-Off in the Making?
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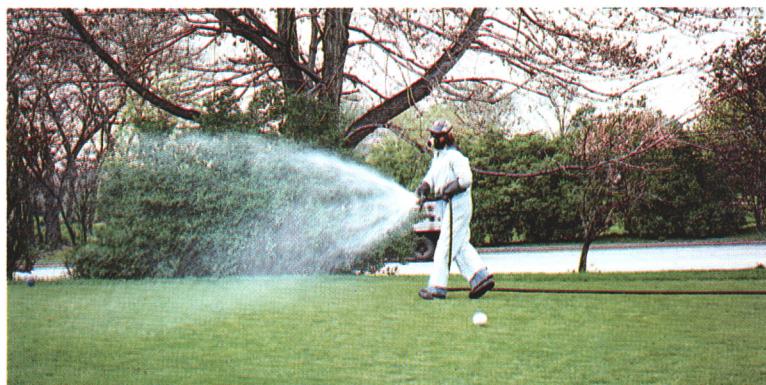
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 Dressing Up for the 1990s! [fairway topdressing]
 Water Movement in Soils
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 Flushing Drains and Brushing Greens
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Drip Irrigation for Establishing and Maintaining Trees	Clemans, Don	1981. May/June 19(3):6-7.
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Current Review of Sewage Effluent for Irrigation Use	Dudeck, A. E.	1978. July/Aug 16(4):5-9.
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Nitrogen Losses From Golf Greens	Brown, K. W., L. R. Duble & J.C. Thomas	1977. Jan/Feb 15(1):5-7.

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The Flowers on The Hills of Industry [hydroseeding]	Bengeyfield, William H.	1980. Jan/Feb 18(1):10-13.
Golf Course Aviary and Animal Problems	Schwartzkopf, Carl H.	1979. July/Aug 17(4):5-7.

FAIRWAYS

Mountain Ridge Country Club, New Jersey

Just One More Little Crisis
 Dressing Up for the 1990s! [fairway topdressing]
 Clipping Disposal In the Dairy State
 Fairway Contour Mowing
 The Continuing Saga of *Poa annua*
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The Quest for Great Fairways
 Focusing In On Golf Course Maintenance - 1986
 Answering the Most-Asked Questions About Thatch
 How to Move Half a Fairway - Quickly and Easily
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 The St. Louis Solution - Zoysiagrass for Fairways!
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 The Six Seasonal Stages of Bentgrass Nitrogen Fertilization
 Late-Season Nitrogen Fertilization: What We Do and Do Not Know
 The Forgotten Magic of Lime
 The C-S-T-M Factor [common sense turf management]
 Mid-Atlantic Region [season in review]

Ironize Your Course for the Winter
 Potassium — A Miracle Element?
 Have We Gone Too Far with Low Nitrogen on Greens?
 The Secrets of Championship Greens Revealed
 A Rolling Stone . . . And Healthy Turf [moss control]

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1990. July/Aug 28(4):1-5.
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Fertility — Using Lower Levels of Nitrogen	Ansett, Timothy G.	1981. Mar/Apr 19(2):26-27.
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Nutrients Affect Color and Vigor of Turfgrasses	Buchanan, William G.	1979. Mar/Apr 17(2):18-20.
Soil Testing for Turfgrasses	Turner, Thomas R.	1978. May/June 16(3):6-8.
"Three Years of Experience With a USGA Green"	Phipps, Bob	1978. Jan/Feb 16(1):11-13.
Some Agronomic Aspects of Turf Fertigation	Snyder, G. H. & E. O. Burt	1977. May/June 15(3):10-12.
Nitrogen Losses From Golf Greens	Brown, K. W., R. L. Duble & J.C. Thomas	1977. Jan/Feb 15(1):5-7.

GOLF COURSE MANAGEMENT & BUDGETS**EQUIPMENT & BUILDINGS**

Greensmower Maintenance	Moraghan, Tim	1991. May/June 29(3):9-11.
Past and Present [equipment modification]	Skorulski, Jim	1991. Mar/Apr 29(2):18.
Help From Above	Connolly, James	1991. Mar/Apr 29(2):31.
A Supplemental Building for Reel and Bedknife Grinding	O'Brien, Patrick M.	1990. Mar/Apr 28(2):33.
Sand From Heaven	Gilhuly, Larry	1990. Mar/Apr 28(2):34-35.
Taking a Look at the Whole Picture	Connolly, James	1989. Nov/Dec 27(6):7-8.
Playing Host to a Championship Can Benefit Your Course!	Moraghan, Tim	1989. Sept/Oct 27(5):1-5.
Turf Groomers: Good for the Grass, Good for the Game	Zontek, Stanley J.	1989. Mar/Apr 27(2):18.
FM Radios on the Golf Course: The Next Best Thing to Being Two Places at the Same Time	Moore, James F.	1988. Nov/Dec 26(6):10-11.
Golf House Management Philosophy — It's a Matter of Quality	Gilhuly, Larry W.	1988. July/Aug 26(4):1-6.
The One-Man Topdressing Operation	Foy, John H.	1988. Mar/Apr 26(2):21-22.
Getting Your House in Order — An Equipment List Update	Gilhuly, Larry W.	1987. Sept/Oct 25(5):8-10.
Gee, I Thought It Ran Forever!	Watschke, Gary A.	1987. July/Aug 25(4):7-9.
Equipment Purchasing & Inventory: Part I	DeHays, H. A.	1987. May/June 25(3):12-13.
Planning the Golf Course Maintenance Facility	Watschke, Gary A.	1987. Mar/Apr 25(2):2-3.
Of Sprays and Sparks	Latham, James M.	1986. July/Aug 24(4):8-10.
Golf Course Safety — Pay Attention Now or Pay (And Pay) Later	Gilhuly, Larry W.	1986. May/June 24(3):1-4.
Focusing In On Golf Course Maintenance — 1986	Gilhuly, Larry W.	1986. Mar/Apr 24(2):15-16.
Hydraulic Leak Warning	Gilhuly, Larry W.	1984. July/Aug 22(4):6-8.
Going Around With Big Wheels	Olson, Karl E.	1984. May/June 22(3):7-8.
Hi-Tech Equipment Calls for Higher Skills and Better Training	Randquist, Robert	1983. Nov/Dec 21(6):5-7.
Should You Change From Triplex Green Mowers to Walking Green Mowers?	Zontek, Stanley J.	1983. Jan/Feb 21(1):1-5.
They Are Mowing Fairways with Triplex Mowers and Picking Up the Clippings, Too!	Zontek, Stanley J.	1982. Mar/Apr 20(2):16-17.
Spending a Little — Saving a Lot	Nugent, Richard P.	1982. Mar/Apr 20(2):23-26.
Why Has Golf Course Design Changed?	Eichner, Richard H.	1981. Mar/Apr 19(2):16-17.
Quality Playing Conditions and Proper Equipment	Snow, James T.	1980. Nov/Dec 18(6):12-14.
The Triplex "Ring"		

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GOLF COURSE MANAGEMENT & BUDGETS (continued)		
EQUIPMENT & BUILDINGS (continued)		
With Perseverance — A New Maintenance Building	Oxenvad, Louis F.	1980. Sept/Oct 18(5):5-7.
Alcohol Fuel — For Golf Course Use	Reese, F. & R. Coulter	1980. Sept/Oct 18(5):11-13.
Golfers Today Are Reaping the Benefits of the Green Section	Snyder, Arthur A.	1980. May/June 18(3):12-13.
Form Follows Function . . . Or Does It?	Miller, Paul F.	1979. Sept/Oct 17(5):9.
We Built a Truckster-Mounted Topdresser	Cedrone, Vic	1979. May/June 17(3):8-9.
Management Makes a Different	Eichner, Richard H.	1978. Mar/Apr 16(2):8-10.
The Numbers Racket — A Better Angle?	Brewer, William S., Jr.	1978. Jan/Feb 16(1):1-5.
Prepare Your Own Topdressing	Verma, Graham P.	1977. Nov/Dec 15(6):9-11.
Great Golf Courses of America —	McKenzie, L. T., R. M. Malpass & W. H. Bengyfield	1977. Mar/Apr 15(2):18-20.
Their Maintenance Crews and Equipment [panel discussion]	Engel, R. E.	
Sump Pumps for Unusual Drainage Problems	Schwartzkopf, Carl H.	1977. Jan/Feb 15(1):8-9.
Take Care of Your Power Sprayer		1977. Jan/Feb 15(1):10-12.
LABOR		
Section Maintenance — It Could Be Your Pot of Gold!	Gilhuly, Larry W.	1991. May/June 29(3):1-4.
Backing Into Professionalization	Metsker, Stan	1990. Mar/Apr 28(2):9.
Improving Your E.Q. [communication]	Moraghan, Tim	1990. Mar/Apr 28(2):32.
The Lone Ranger Rides Again	Moraghan, Tim P.	1989. Jan/Feb 27(1):7-9.
Employee Development: Management's Responsibility	Youngs, Greg	1988. Nov/Dec 26(6):7-9.
Required Maintenance Versus Available Labor —	Moore, Martin	1988. Jan/Feb 26(1):12-14.
Are You Adequately Staffed?		
Training for Today's and Tomorrow's Golf Course Superintendents	DuBose, Harry M.	1983. July/Aug 21(4):9-10.
Hiring Practices	Snow, James T.	1983. Mar/Apr 22(2):5-6.
I Need a Secretary!	Hawes, Douglas T.	1984. Mar/Apr 22(2):10-11.
A Secretary for the Golf Course Superintendent —	Bator, Richard	1982. July/Aug 20(4):11-12.
The Need Is Great!		
Spending a Little — Saving a Lot	Zontek, Stanley J.	1982. Mar/Apr 20(2):16-17.
Quality Playing Conditions and Priorities	Horton, Edward C.	1981. Mar/Apr 19(2):7-9.
(A Suggested Guide When Starting a New Job)		
The Economy and Course Playing Quality	Buchanan, William G.	1980. Sept/Oct 18(5):1-4.
New Zealand — Turfgrass Management in an Incredible Land	Bengeyfield, W. H.	1978. July/Aug 16(4):10-12.
Great Golf Courses of America —	McKenzie, L. T., R. M. Malpass & W. H. Bengyfield	1977. Mar/Apr 15(2):18-20.
Their Maintenance Crews and Equipment [panel discussion]		
BUDGET		
Playing Host To a Championship Can Benefit Your Course!	Moraghan, Tim P.	1989. Sept/Oct 27(5):1-5.
Avoiding False Economy in Golf Course Management	Veron, J. Michael	1989. May/June 27(3):9-10.
Getting the Priorities Straight	Zontek, Stanley J.	1988. Sept/Oct 26(5):17.
What Do You Do With It All?	Goss, Roy L.	1987. May/June 25(3):6-8.
Never Compare Golf Course Budgets	Bailey, David	1987. Jan/Feb 25(1):5-6.
Who Said, "The Grass is Always Greener . . ."	Snow, James T.	1985. Jan/Feb 23(1):1-4.
Budgeting and Purchasing: Important Factors	Williams, Bruce R.	1984. Mar/Apr 22(2):4-5.
in the Business of Golf Course Management		
Controlling Golf Course Maintenance Costs — An Owner's View	Giustina, N. B.	1983. Jan/Feb 21(1):6-8, 13.
Quality Playing Conditions and Budgeting	Black, C. William	1981. Mar/Apr 19(2):10-11.
Management Makes a Difference	Eichner, Richard H.	1978. Mar/Apr 16(2):8-10.
Management Makes a Difference — The Budget	Snow, James T.	1978. Mar/Apr 16(2):13-14.
The Numbers Racket — A Better Angle?	Brewer, William S.	1978. Jan/Feb 16(1):1-5.
Great Golf Courses of America — Their Maintenance Budgets	Marquoit, Tom	1977. Mar/Apr 15(2):14-17.
COMPUTERS		
Graphic Golf Course Management	Moore, James F.	1990. July/Aug 28(4):9-12.
40 Megabytes of Donald Ross	Connor, Edward H.	1990. Mar/Apr 28(2):6-8.
How To Make the Right Connections	Moore, James F.	1988. May/June 26(3):4-6.
Personal Computers — A New Chip for the Course	Moore, James F.	1985. Nov/Dec 23(6):1-4.
Monitoring the Operations	Buchanan, William G.	1984. Mar/Apr 22(2):7-8.
The Art of Yesterday — The Science of Today	Bengeyfield, William H.	1982. Mar/Apr 20(2):2-3.

GOLF COURSE MANAGEMENT & BUDGETS (continued)**MAINTENANCE PHILOSOPHY**

Just One More Little Crisis	Pierson, Dan	1991. May/June 29(3):5-8.
Take a Hike! [walking the course]	Gilhuly, Larry W.	1991. Mar/Apr 29(2):2-3.
What's your Batting Average?	Zontek, Stanley J.	1990. Sept/Oct 28(5):17.
An Opinion on Unreasonable Expectations		
Glitz and Glamour Golf	Radko, Al	1990. July/Aug 28(4):17.
It's The Little Things That Count	Lyon, Dennis	1990. Mar/Apr 28(3):27-29.
Golf House Management Philosophy — It's a Matter of Quality	Gilhuly, Larry W.	1988. July/Aug 26(4):1-6.
Impressions of a Summer's Tour With the Green Section	Moore, Sherwood A.	1988. May/June 26(3):6-8.
Management on the Edge	Moore, James F.	1987. July/Aug 25(4):1-3.
A Few Minutes With Frank Hannigan	Hannigan, Frank	1987. Mar/Apr 25(2):30-32.
Reflections On a Recent Journey to Scotland	Quast, Danny H.	1985. Nov/Dec 23(6):11-12.
Is Today's Golf Course Management Too Fine?	Goss, Roy L.	1985. Mar/Apr 23(2):23-25.
Why Don't the Greens Hold?	Buchanan, William G.	1984. July/Aug 22(4):1-5.
Turf Management in England and Scotland: So Similar, Yet So Different	Zontek, Stanley J.	1984. July/Aug 22(4):12-13.
Ideas on Management		
Monitoring the Operations	Hale, Nathan B.	1984. May/June 22(3):9-10.
Who Sets the Standards for Play on Your Golf Course?	Buchanan, William G.	1984. Mar/Apr 22(2):7-8.
Some Qualities of Great Golf Course Superintendents	Osterman, Robert W.	1984. Mar/Apr 22(2):12-14.
The Golf Course Superintendent and Maintaining the Integrity of the Course	Hand, James R.	1984. Mar/Apr 22(2):26-29.
Quality Playing Conditions for the Public Golfer	Fleming, John	1983. Sept/Oct 21(5):11-13.
For Good Golf and Good Turf — Use Less Water		
To Live — Grass Must Be Green	Finamore, Steve	1983. May/June 21(3):4-5.
How Green is Green? How Brown is Brown? A Middle Approach	Zoller, John A.	1983. Mar/Apr 21(2):22-24.
Controlling Golf Course Maintenance Costs - An Owner's View	Watson, J.R.	1983. Mar/Apr 21(2):25-27.
Place the Emphasis on Playing Conditions	Cadenelli, Stephen B.	1983. Mar/Apr 21(2):27-28.
Practice Ranges — Are They Neglected?	Giustina, N. B.	1983. Jan/Feb 21(1):6-8,13.
Quality Playing Conditions for Every Day	Buchanan, William G.	1982. Mar/Apr 20(2):14-15.
The Economy and Course Playing Quality	Brewer, William S.	1982. Jan/Feb 20(1):11-13.
A Playing Comparison of British and American Courses	Mitchell, Robert V.	1981. Mar/Apr 19(2):2-4.
A Golfer's View of Maintenance	Buchanan, William G.	1980. Sept/Oct 18(5):1-4.
Firm vs. Soft Playing Conditions	Sigel, Jay	1980. Mar/Apr 18(2):4.
The Best Laid Plans . . .	Berg, Tim	1979. Nov/Dec 17(6):9-12.
One Management System to Check Skyrocketing Costs	Black, Joe	1979. Mar/Apr 17(2):11-13.
	Snow, James T.	1978. Nov/Dec 16(6):1-6.
	Davis, Gregory R.	1977. May/June 15(3):6-8.

GREEN COMMITTEE

Liability on the Golf Course	Veron, J. Michael	1990. Sept/Oct 29(5):10-14.
Make the Most of a Great Resource — USGA Green Section Visits	Davies, Ray	1990. May/June 28(3):6-7.
The Winner in the Long Run [green chairman]	Gilhuly, Larry W.	1988. July/Aug 26(4):17.
Course Care: Responsibility of the Player Too!	Radko, Alexander M.	1980. May/June 18(3):7-9.
The Trials and Tribulations of a Green Committee Chairman	Keel, Howard	1987. Mar/Apr 25(2):27-29.
Green Committees	Steel, Donald	1986. May/June 24(3):11.
Time Is of the Essence	Walsh, Ed	1985. Mar/Apr 23(2):12.
What Am I, Chopped Liver?	Quast, Danny H.	1985. Mar/Apr 23(2):14-16.
The More Information We Pass On — The Less We Have to Communicate!	Luigs, Joe	1985. Mar/Apr 23(2):16-18.
Some Committee Questions That Come to Mind	Budd, Eli	1985. Mar/Apr 23(2):20.
Mr. Superintendent — Mr. Green Chairman: Here's One Way to Improve More Than Your Lie!	Anonymous	1984. May/June 22(3):13.
Money Is Not the Problem	Monson, John	1984. Mar/Apr 22(2):9-10.
Should a Green Committee Be Green?	Moncrief, James B.	1982. Mar/Apr 20(2):12-13.
Membership Questionnaires — Find Out Where You Really Stand	Stark, William B., & W. Brewer	1981. Jan/Feb 19(1):5-8.
"Mr. Green Committee Chairman"	Cato, Paul D., Jr.	1979. July/Aug 17(4):11-13.
The Best Laid Plans . . .	Snow, James T.	1978. Nov/Dec 16(6):1-6.
The Public Parks Golfer Deserves Something More Than Mediocre Golfing Turf!	Bengeyfield, William H.	1978. May/June 16(3):1-5.

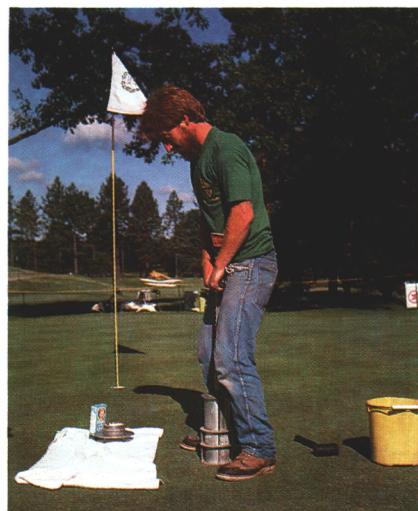
MISCELLANEOUS

Stewards of the Land: An Opportunity	Faubel, Gerald	1991. Mar/Apr 29(2):22-24.
Field Testing For Better Management	Skorulski, James E.	1991. Jan/Feb 29(1):15-17.

Article Title**Author****Year. Issue Volume(no.):pg.****GOLF COURSE MANAGEMENT & BUDGETS (continued)****MISCELLANEOUS (continued)**

- The Aftermath of a Hurricane
 The International Flavor of Golf Course Management
 What They Don't Teach in Turf Schools
 Why Are Golf Courses Used as Proving Grounds?
 Government Golf — Keeping Up With the Competition
 Injuries on the Golf Course — Do You Know What to Do?
 Public Golf Courses Ain't Dogs Anymore
 Programs With an Eye Toward the Future
 Slow Down . . . You're Going Too Fast
 Aerial Photography and Maintenance Mapping
 Vandalism - Is There Any Answer?
 Getting Ready for Summer: Lightning Alert
 Maintenance by Priority
 Quality Playing Conditions and Budgeting
 Infrared Photography
 Electrostatic Spraying of Turfgrass
- A Machine for Cleaning Sand Bunkers
 The ABCs of Management
 "Yes! There Is Something New Under the Sun" [quality control]
 The Outlook for Turf

- O'Brien, Patrick M.
 Segui, John
 Johns, James A.
 Latham, James M.
 Latham, James M.
 Couchman, Glen
 Sokolis, Ted
 Hearn, Donald E.
 Snow, James T.
 Watschke, Gary A.
 Moncrief, James B.
 Gray, Dick
 White, Charles B.
 Mitchell, Robert V.
 Faubel, Gerald L.
 Anantheswaran, R.C.
 & S.E. Law
 Verma, Brahm P.
 Schwartzkopf, Carl H.
 Sanders, Bob
 Moncrief, James B.
1990. May/June 28(3):10-12.
 1989. Mar/Apr 27(2):6-7.
 1989. Mar/Apr 27(2):8-9.
 1988. Nov/Dec 26(6):12.
 1988. Sept/Oct 26(5):1-5.
 1988. Sept/Oct 26(5):6-8.
 1988. Mar/Apr 26(2):13-15.
 1988. Mar/Apr 26(2):16-18.
 1987. Jan/Feb 25(1):7-10.
 1986. Mar/Apr 24(2):32.
 1982. July/Aug 20(4):1-5.
 1982. May/June 20(3):13.
 1981. May/June 19(3):1-3.
 1981. Mar/Apr 19(2):10-11.
 1980. Mar/Apr 18(2):20-21.
 1979. Nov/Dec 17(6):1-4.
1978. Nov/Dec 16(6):10-12.
 1978. Mar/Apr 16(2):11-12.
 1977. Sept/Oct 15(5):12.
 1977. Jan/Feb 15(1):1-5.

GOLF GREENS**CONSTRUCTION**

- The Coarse Sand Layer — A Look at Installation
 Looking for a "Fast Food" Version of the USGA Spec Green
 Thirty Years of Green Section Greens
 Sometimes Successful Agronomy Means Starting Over
 Putting Green Construction: Interpreting Physical Soil Test Data
 Back Yard Putting Greens: Dreams or Nightmares?
 Building Greens the Wrong Way Is Not Right
 The Agronomics of Sand in Construction and Topdressing
 Peat In Greens: Knowns, Unknowns and Speculations
 Need Insurance? Hydromulching is One Good Policy

- Great Lakes Region [season in review]
 Building Greens the Right Way — It's Easier Than You Think!
 Everything You've Always Wanted to Know About Putting Green
 Soil Mixes But Didn't Know Whom to Ask

- Brame, Robert A.
 Snow, James T.
 Latham, James M.
 Vermeulen, Paul
 Latham, James M.
 Danneberger, Karl
 Moore, James F.
 Latham, James M.
 Kussow, Wayne R.
 O'Brien, Patrick M. &
 R. Barksdale
 Latham, James M.
 Neal, Harold G.
 Gockel, Judith Ferguson
1991. July/Aug 29(4):9-10.
 1991. July/Aug 29(4):17
 1990. May/June 28(3):1-5.
 1989. July/Aug 27(4):1-4.
 1989. July/Aug 27(4):4-7.
 1988. Jan/Feb 26(1):6-7.
 1988. Jan/Feb 26(1):15-17.
 1987. Sept/Oct 25(5):1-4.
 1987. Sept/Oct 25(5):5-7.
 1987. Jan/Feb 25(1):1-4.
1986. Nov/Dec 24(6):10.
 1986. July/Aug 24(4):11-13.
 1986. Mar/Apr 24(2):7-9.

GOLF GREENS (continued)**CONSTRUCTION (continued)**

- The Soils Controversy — Mixes for Green Construction and Topdressing
 Sand — The Building Block
 Green Construction: The Right Materials Mixed Right
 The Necessity of the Two-Inch Sand Layer in Greens Construction
- The Influence of the Sand Layer on Available Water Retention in Golf Greens
 Construction of the USGA Green by the Superintendent
 When All Else Fails — Use Proven Guidelines
 Principles of Soil Preparation for Drained Golf Greens

- Ferguson, Marvin H. 1983. Mar/Apr 21(2):18-21.
 White, Charles B. 1982. Sept/Oct 20(5):1-5.
 Ansett, Timothy G. 1982. Mar/Apr 20(2):21-22.
 Brown, K. W., J. C. Thomas & A. Almodares 1980. Nov/Dec 18(6):1-4.
 Brown, K. W. & J. C. Thomas 1980. Nov/Dec 18(6):5-7.
 Miller, Louis E. 1980. Mar/Apr 18(2):7-10.
 Brewer, William S. 1979. Jan/Feb 17(1):1.
 Spomer, L. Art 1977. July/Aug 15(4):9-12.

GOLF GREEN MANAGEMENT

- Going for the Gold with Bermudagrass Greens
 Just One More Little Crisis
 Finding Solutions for Poorly Drained Greens
 Field Testing for Better Management
 Controlling the Battle of Bermudagrass
 Comparing Hollow- and Solid-Tine Cultivation
- Managing Fertility in High-Sand-Content Greens
 40 Megabytes of Donald Ross
 A Selective Annual Bluegrass Control — Finally!
 Maintaining Adequate Phosphorus Levels in Sand Greens
 Encroachment of Bermudagrass into Bentgrass Greens
- Those Were the Good Old Days!
 Consider *Poa annua* for Your New Green
 Gassing and Regrassing
 Sometimes Successful Agronomy Means Starting Over
 Turf Groomers: Good for the Grass, Good for the Game
 Pumping and Coring
 The Art of Handwatering
 Managing Greens Under Stress
 Snake Oils
 It Was a Long Time Coming [deep aerification]
 Bentgrass or Bermudagrass Greens — What is Right for Florida?
 Politics, Religion, and Winter Play on Greens
 1987: The Season in Review
- Managing Anaerobic Soils
 The C-S-T-M Factor [common sense turf management]
 Rooting Depth and Soil Sampling
 A Supplemental Irrigation System for Putting Greens
 Mid-Atlantic Region [season in review]
- Mid-Continent Region [season in review]
 Core Transplanting
 Flushing Drains and Brushing Greens
 Aerial Photography and Maintenance Mapping
 Agri-Systems Soil Testing Laboratory Will Continue
 Is Today's Golf Course Management Too Fine?
 Have We Gone Too Far with Low Nitrogen on Greens?
 Who Said, "The Grass is Always Greener . . ."
 Bent or Bermuda Greens? A Tough Decision for the Southern Superintendent
 The Secrets of Championship Greens Revealed
 A Rolling Stone . . . and Healthy Turf [moss control]

- Foy, John H. 1991. July/Aug 29(4):1-4.
 Pierson, Dan 1991. May/June 29(3):5-8.
 Snow, James T. 1991. Jan/Feb 29(1):10-14.
 Skorulski, James 1991. Jan/Feb 29(1):15-17.
 Foy, John H. 1990. Nov/Dec 28(6):13-16.
 Murphy, J. A. & P. E. Rieke 1990. Sept/Oct 28(5):7-10.
- Zontek, Stanley J. 1990. July/Aug 28(4):1-5.
 Connor, Edward H. 1990. Mar/Apr 28(2):6-8.
 Branham, B. E. 1990. Jan/Feb 28(1):6-8.
 Rieke, Paul E. 1989. Nov/Dec 27(6):5-6.
 Johnson, B. J. & R. N. Carrow 1989. Nov/Dec 27(6):9-12.
- Zontek, Stanley J. 1989. Nov/Dec 27(6):13.
 Vermeulen, Paul 1989. Sept/Oct 27(5):17.
 Walker, Tom 1989. July/Aug 27(4):10-12.
 Vermeulen, Paul 1989. July/Aug 27(4):1-4
 Zontek, Stanley J. 1989. Mar/Apr 27(2):18.
 Moore, James F. 1989. Mar/Apr 27(2):34-35.
 Sayre, Gary 1988. July/Aug 26(4):13-15.
 Zontek, Stanley J. 1988. May/June 26(3):1-4.
 Moore, James F. 1988. May/June 26(3):13.
 Zontek, Stanley J. 1988. Mar/Apr 26(2):5.
 Foy, John H. 1988. Jan/Feb 26(1):1-5.
 Snow, James T. 1987. Nov/Dec 25(6):1-4.
 Zontek, S. J., J. T. Snow, G. A. Watchke, J. J. Latham, P. M. O'Brien, J. H. Foy, J. F. Moore & L. W. Gilhuly 1987. Nov/Dec 25(6):7-12.
- Goss, Roy L. 1987. July/Aug 25(4):12-13.
 Zontek, Stanley J. 1987. Mar/Apr 25(2):24-25.
 Moore, James F. 1987. Mar/Apr 25(2):33.
 O'Brien, Patrick M. 1987. Mar/Apr 25(2):34.
 Zontek, Stanley J. & P. M. O'Brien 1986. Nov/Dec 24(6):8.
- Moore, James F. 1986. Nov/Dec 26(6):12.
 Olson, Karl Ed 1986. Mar/Apr 24(2):4-5.
 White, Charles B. 1986. Mar/Apr 24(2):14-15.
 Watschke, Gary A. 1986. Mar/Apr 24(2):32.
 Anonymous 1985. Mar/Apr 23(2):11.
 Goss, Roy L. 1985. Mar/Apr 23(2):23-25.
 Radko, A.M. 1985. Mar/Apr 23(2):26-28.
 Snow, James T. 1985. Jan/Feb 23(1):1-4.
 Moore, James F. 1985. Jan/Feb 23(1):5-6.
- Hawes, Douglas T. 1984. Nov/Dec 22(6):1-4.
 Snow, James T. 1984. Nov/Dec 22(6):7-9.

Article Title**Author****Year, Issue Volume(no.):pg.****GOLF GREENS (continued)****GOLF GREEN MANAGEMENT (continued)**

Why Don't the Greens Hold?

Should You Change From Triplex Green Mowers to Walking Green Mowers?

Nursery Rhymes [turfgrass nurseries]

For Good Golf and Good Turf — Use Less Water

Overseeding Bentgrass Greens - Is It Worth It?

Early Spring Greenup — Don't Push It

The Problems of Puffiness in Putting Greens

Comparing Maintenance Costs: Bentgrass Versus Bermudagrass Greens

The Nature and Control of Decline and Dying-Out of Toronto C-15 Bentgrass — A Progress Report

Management for Better Roots

The Toronto C-15 Bentgrass Syndrome

Overseeding Bermudagrass Greens

Grooming Greens for Play

Fertility — Using Lower Levels of Nitrogen

The Triplex "Ring"

The Economy and Course Playing Quality

The Changing Scene

Putting Greens: Dealing With Snow and Ice Accumulations

Putting Green Complex

Putting Greens — Grooming the Surface

Putting Greens — The Height of Cut

Penneagle Creeping Bentgrass

When All Else Fails — Use Proven Guidelines

"Three Years of Experience with a USGA Green"

Buchanan, William G.
Randquist, Robert1984. July/Aug 22(4):1-5.
1983. Nov/Dec 21(6):5-7.White, Charles B.
Zoller, John A.
Silva, Brian
Snow, James T.
Engel, Ralph
Davis, Mike1983. Sept/Oct 21(5):8-10.
1983. Mar/Apr 21(2):22-24.
1982. Sept/Oct 20(5):12-13.
1982. May/June 20(3):6-8.
1982. May/June 20(3):9-10.
1982. Jan/Feb 20(1):5-7.

Couch, H. B.

1981. Nov/Dec 19(6):4-7.

Hawes, Douglas T.
Radko, Alexander M.
Moncrief, James B.
Snow, James T.
Ansett, Timothy G.
Snow, James T.
Buchanan, William G.
Anonymous
Snow, James T.
Zontek, Stanley J.
Snow, James T.
Hoos, Donald D. & W. Faust1981. Nov/Dec 19(6):8-9.
1981. July/Aug 19(4):8.
1981. Mar/Apr 19(2):19.
1981. Mar/Apr 19(2):25-26.
1981. Mar/Apr 19(2):26-27.
1980. Nov/Dec 18(6):12-14.
1980. Sept/Oct 18(5):1-4.
1980. May/June 18(3):10-11.
1980. Jan/Feb 18(1):1-3.
1979. Sept/Oct 17(5):1-5.
1979. Sept/Oct 17(5):6-8.
1979. July/Aug 17(4):1-4.Duich, J. M.
Brewer, William S.
Phipps, Bob1979. July/Aug 17(4):8-10.
1979. Jan/Feb 17(1):1.
1978. Jan/Feb 16(1):11-13.**TOPDRESSING**

Working the Topdressing In and Rolling Greens Revisited

Topdressing of a Different Color

Sanding and Sweeping

The One-Man Topdressing Operation

The Agronomics of Sand in Construction and Topdressing

Topdressing Operations That Vibrate

From the Worm's Eye View — Topdressing

The Soils Controversy — Mixes for Green Construction and Topdressing

Putting Green Responses to Sand and Sand/Soil Topdressing

Topdressing

Topdressing Putting Greens: A Panel Discussion

Topdressing Mixtures — The Green Section's Position
Prepare Your Own TopdressingFoy, John H.
Foy, John H.
Oatis, David A.
Foy, John H.
Latham, James M.
Latham, James M.
Gockel, Judith Ferguson
Ferguson, Marvin H.1991. Mar/Apr 29(2):3-4.
1990. Mar/Apr 28(2):2-3.
1990. Mar/Apr 28(2):30-31.
1988. Mar/Apr 26(2):21-22.
1987. Sept/Oct 25(5):1-4.
1987. Mar/Apr 25(2):35-36.
1986. Nov/Dec 24(6):5-7.
1983. Mar/Apr 21(2):18-21.Cooper, R. J. & C. R. Skogley
Hoos, Donald D.
Zontek, Stanley J., J. Berarducci,
R. Knapp, J. Snow,
C. White, D. Hawes
& D. Hoos1981. May/June 19(3):8-13.
1981. Mar/Apr 19(2):22.
1980. Mar/Apr 18(2):22-25.Green Section Staff
Verma, Brahm P.1977. Nov/Dec 15(6):5-8.
1977. Nov/Dec 15(6):9-11.**STIMPMETER**

Working the Topdressing In and Rolling Greens Revisited

It's Time We Put the Green Back in Green Speed

Measuring Green Speed on Sloped Putting Greens

Say No to Posting [green speed]

Rolling Out the Ups and Downs of Green Speed

Food for Thought — Regarding Fast Greens

Some (More) Thoughts on Putting Green Speed

The Stimpmeter — A Perspective

How It All Began

A New Turf Menace

Foy, John H.
Oatis, David A.
Brede, A. Douglas
Connolly, James
Latham, James M.
Zedreck, Michael
Engel, Ralph E.
Radko, Alexander M.
Thomas, Frank W.
Albaugh, Julius1991. Mar/Apr 29(2):3-4.
1990. Nov/Dec 28(6):1-6.
1990. Nov/Dec 28(6):10-12.
1990. Nov/Dec 28(6):17.
1990. Mar/Apr 28(2):17.
1987. July/Aug 25(4):10-12.
1984. Nov/Dec 22(6):5-6.
1984. Sept/Oct 22(5):12-13.
1983. Mar/Apr 21(2):10-11.
1983. Mar/Apr 21(2):11-12.

GOLF GREENS (continued)**STIMPMETER (continued)**

It's a Good Tool — Use with Caution and Restraint
 Up With the Stimpmeter
 The Green Section's Stimpmeter: Most Think Friend —
 Some Think Enemy
 The Stimpmeter — A Management Tool
 A Study of Putting Green Variability

Mitchell, Robert V.
 Zontek, Stanley J.
 Hoos, Donald D.

1983. Mar/Apr 21(2):13-16.
 1983. Mar/Apr 21(2):16-17.
 1982. July/Aug 20(6):9-10.

Influence of Mowing Procedures on Roll Speed of Putting Greens

O'Brien, Patrick M.
 Radko, A. M.,
 R. E. Engel,
 & J. R. Trout
 Engel, R. E.,
 A. M. Radko
 & J. R. Trout

1981. Mar/Apr 19(2):28-29.
 1981. Jan/Feb 19(1):9-13.

How Fast Are Your Greens? — An Update
 The Stimpmeter and The Open

Radko, Alexander M.
 Thomas, Frank

1978. Mar/Apr 16(2):20-21.
 1978. Nov/Dec 16(6):7-9.

GRASSES**WARM-SEASON GRASSES**

Going for the Gold with Bermudagrass Greens
 A History of Turf Research at Tifton
 An Old Grass is Getting a New Look
 Controlling the Battle of Bermudagrass
 Encroachment of Bermudagrass Into Bentgrass Greens

Foy, John H.
 Burton, Glenn W.
 Riordan, Terry
 Foy, John H.
 Johnson, B. J. &

1991. July/Aug 29(4):1-4.
 1991. May/June 29(3):12-14.
 1991. Jan/Feb 29(1):6-9.
 1990. Nov/Dec 28(6):13-16.
 1989. Nov/Dec 27(6):9-12.

More Transition Zone Blues
 NuMex Sahara — A New Seed-Propagated Bermudagrass
 Low-Water-Use Turfgrasses
 A Report on the New Grasses Being Developed for Golf
 Drought Resistance Comparisons Among Major Warm-Season
 Turfgrasses

R. N. Carrow
 Kenna, Mike
 Baltensperger, Arden
 Beard, James B.
 Gibeault, Victor A.
 Kim, K. S.,

1989. Sept/Oct 27(5):6-8.
 1989. Jan/Feb 27(1):5-6.
 1989. Jan/Feb 27(1):12-13.
 1988. Nov/Dec 26(6):5-7.
 1988. Sept/Oct 26(5):12-15.

A Look at Turfgrass Water Conservation
 Bentgrass or Bermudagrass Greens — What Is Right for Florida?
 Use of Fenarimol for Selectively Controlling *Poa annua* in an
 Overseeded Bermudagrass Golf Green
 Bermudagrass Management to Reduce Winter Injury —
 Pay Now or Pay Later
 A Bermudagrass Primer and the Tifton Bermudagrass
 Quality Turf in the Natural Environment — Enhanced Through
 Genetic Improvement
 Bent or Bermuda Greens? A Tough Decision for the
 Southern Superintendent
 The St. Louis Solution — Zoysiagrass for Fairways!
 Exploration for Zoysiagrass in Eastern Asia

J. B. Beard &
 S. I. Sifers
 Carrow, Robert N.
 Foy, John H.
 Menn, Wallace G.

1988. July/Aug 26(4):7-9.
 1988. Jan/Feb 26(1):1-5.
 1986. Sept/Oct 24(5):11-12.

Chalmers, David R.

1986. May/June 24(3):8-10.

Hanna, Wayne W.
 Engelke, M. C.

1986. Jan/Feb 24(1):11-13.
 1985. Nov/Dec 23(6):5-7.

Moore, James F.

1985. Jan/Feb 23(1):5-6.

Zontek, Stanley J.
 Murray, J. Jack &
 M. C. Engelke

1983. July/Aug 21(1):1-5.
 1983. May/June 21(3):8-12.

GRASSES (continued)**WARM-SEASON GRASSES (continued)**

- Some Ideas for Easing the Southern Transition Blues
The Bermudagrass Stunt Mite
Buffalograss — A "New" Turfgrass for Golf Courses?
- Recent Turfgrass Plant Explorations in Africa
- Something Better in Grasses
Cool-Season/Warm-Season Turfgrass Management in the Transition Zone
Bermudagrass and Bentgrass — Draw the Line!
Zoysiagrass Establishment From Seed
Tifway II Bermudagrass Released
Overseeding Bermudagrass Greens
Spring Root Dieback of Warm-Season Turfgrasses
- Spring Deadspot of Bermudagrass
Zoysia: For the Transition Zone
Color Variances in Turfgrasses
The Search for Better Grasses
Better Turf Means Better Golf: The Bermudagrasses — Past, Present & Future

- Hawes, Douglas T.
Reinert, James A.
Borland, Dorothy &
J. D. Butler
Beard, James B. &
J. R. Watson
Snow, James T.
Mazur, A. R.
- White, Charles B.
Portz, Herbert L.
Burton, Glenn W.
Moncrief, James B.
DiPaola, J. M. &
J. B. Beard
Lucas, Leon T.
Hawes, Douglas T.
Radko, Alexander M.
Youngner, Victor B.
Burton, Glenn W.
1982. Nov/Dec 20(6):1-3.
1982. Nov/Dec 20(6):9-12.
1982. Sept/Oct 20(5):6-8.
1982. July/Aug 20(4):6-8.
1982. Mar/Apr 20(2):6-9.
1982. Nov/Dec 19(6):10-12.
1981. Sept/Oct 19(5):8-9.
1981. Sept/Oct 19(5):10-13.
1981. July/Aug 19(4):8.
1981. Mar/Apr 19(2):19.
1980. July/Aug 18(4):6-9.
1980. May/June 18(3):4-6.
1979. May/June 17(3):1-4.
1979. Mar/Apr 17(2):16-17.
1978. Mar/Apr 16(2):15-19.
1977. Mar/Apr 15(2):5-7.

COOL-SEASON GRASSES

- A Selective Annual Bluegrass Control — Finally!
Consider *Poa annua* for Your New Green
The Six Seasonal Stages of Bentgrass Nitrogen Fertilization
Bentgrass or Bermudagrass Greens — What is Right for Florida?
The Continuing Saga of *Poa annua*
Bent/*Poa* Roughs . . . Another Look
Use of Fenarimol for Selectively Controlling *Poa annua* in an Overseeded Bermudagrass Golf Green
Turf-Type Tall Fescues Are Here!
- Pythium-Induced Root Dysfunction of Creeping Bentgrass on High Sand Content Greens
Bent or Bermuda Greens? A Tough Decision for the Southern Superintendent
Turfgrass Competition: It's a Jungle Out There!
Lolium-Folium: Perennial Ryegrasses are Getting Better!
Growth of Bentgrass as Affected by Nitrogen, Soil pH and Age of Stand
Parasitic Nematode Found in Annual Bluegrass Greens
Some Ideas for Easing the Southern Transition Blues
Bent-*Poa* Roughs . . . A Modern Dilemma
Overseeding Bentgrass Greens — Is It Worth It?
Recent Turfgrass Plant Explorations in Africa
- Something Better in Grasses
The Nature and Control of Decline and Dying-Out of Toronto C-15 Bentgrass - A Progress Report
Cool-Season/Warm-Season Turfgrass Management in the Transition Zone
Bermudagrass and Bentgrass — Draw the Line!
Bentgrass Fairways . . . Why Not?
The Toronto C-15 Bentgrass Syndrome
Penneagle Creeping Bentgrass
Leaf Blight and Crown Rot of Toronto Creeping Bentgrass
Color Variances in Turfgrasses
Irrigation Affects Species Predominance
Disease Resistance and Quality of Bentgrasses in Washington State
- The Search for Better Grasses
Poa annua — It Won't Go Away!

- Branham, B. E.
Vermeulen, Paul
Engel, Ralph E.
Foy, John H.
Zontek, Stanley J.
Byers, Richard P.
Menn, Wallace G.
- O'Brien, Patrick M.
& R. Hurley
Hodges, Clinton F.
- Moore, James F.
- Brede, A. Douglas
Zontek, Stanley J.
Pepper, Ian L. &
W. R. Kneebone
Costello, Larry
Hawes, Douglas T.
Snow, James T.
Silva, Brian
Beard, James B. &
J. R. Watson
Snow, James T.
Couch, H.B.
- Mazur, A. R.
- White, Charles B.
O'Brien, Patrick M.
Radko, Alexander M.
Duich, J. M.
Larsen, Philip O.
Radko, Alexander M.
Snow, James T.
Gould, C. J.,
R. L. Goss, A. G. Law
& B. Ashworth
Youngner, Victor B.
Goss, Roy L.
1990. Jan/Feb 28(1):6-8.
1989. Sept/Oct 27(5):17.
1988. July/Aug 26(4):10-12.
1988. Jan/Feb 26(1):1-5.
1987. May/June 25(3):1-5.
1986. Sept/Oct 24(5):8-10.
1986. Sept/Oct 24(5):11-12.
1986. Jan/Feb 24(1):1-5.
1985. Sept/Oct 23(5):11-13.
1985. Jan/Feb 23(1):5-6.
1985. Jan/Feb 23(1):8-11.
1984. May/June 22(3):1-6.
1984. May/June 22(3):10-12.
1983. Jan/Feb 21(1):9-11.
1982. Nov/Dec 20(6):1-3.
1982. Nov/Dec 20(6):6-8.
1982. Sept/Oct 20(5):12-13.
1982. July/Aug 20(4):6-8.
1982. Mar/Apr 20(2):6-9.
1981. Nov/Dec 19(6):4-7.
1981. Nov/Dec 19(6):10-12.
1981. Sept/Oct 19(5):8-9.
1981. July/Aug 19(4):1-3.
1981. July/Aug 19(4):8.
1979. July/Aug 17(4):8-10.
1979. May/June 17(3):5-7.
1979. Mar/Apr 17(2):16-17.
1979. Mar/Apr 17(2):21-22.
1978. Sept/Oct 16(5):5-11.
1978. Mar/Apr 16(2):15-19.
1978. Mar/Apr 16(2):26-29.

GREEN SECTION INFORMATION & AWARDS**USGA Funds Environmental Impact Studies**

Joseph C. Troll — 1991 USGA Green Section Award Recipient

The USGA's Environmental Program

In Memoriam [Fred Grau]

USGA Announces \$3 Million Environmental Impact Study

Make the Most of a Great Resource — USGA Green Section Visits

Chester Mendenhall Receives USGA Green Section Award for 1990

The USGA Today

James B. Beard Receives USGA Green Section Award for 1989

The USGA/GCSAA Research Program: Receiving and Disbursing Research Funds

The USGA Turfgrass Information File Goes On-Line August 1, 1988

Impressions of a Summer's Tour With the Green Section

Roy L. Goss — USGA Green Section Award Recipient for 1988

The USGA-GCSAA Research Program at the Halfway Point

Sherwood A. Moore USGA Green Section 1987 Award Recipient

The Honor Roll [contributors to research]

James B. Moncrief USGA Green Section 1986 Award Recipient

Reflections on Golf's Future

Dr. Victor B. Youngner USGA Green Section 1985 Award Recipient

In Tribute to Marvin H. Ferguson

Dr. Victor B. Youngner's Death — A Great Loss to All in Golfing Turf

Mr. Superintendent — Mr. Green Chairman: Here's One Way to Improve More Than Your Lie!

Dr. William H. Daniel, USGA Green Section 1984 Award Recipient

Fresh From the Drawing Board

Update on the Green Section's Turfgrass Research Committee

Alexander M. Radko, USGA Green Section 1983 Award Recipient

A New Theme for the Green Section and Turf Advisory Service: "Golf Makes America Beautiful"

James Moncrief Retires

The Green Section's New Turfgrass Research Committee

Charles B. Wilson, USGA Green Section 1982 Award Recipient

Has the Green Section Ever Made a Mistake?

Al Radko Retires

Dr. Joseph M. Duich Named Recipient of the 1981 USGA Green Section Award

60 Years of Service to Golf . . . The Story of the USGA's Green Section

The Green Section Took a New Direction in 1953.

Recipients: USGA Green Section Award

Golfers Today Are Reaping the Benefits of the Green Section

Miracle of the Green Pastures

The Green Section Today

Dr. C. Reed Funk: 20th Recipient of USGA Green Section Award

Anonymous

Anonymous

Snow, James T.

Anonymous

Anonymous

Davies, Ray

Anonymous

Russell, B. P.

Anonymous

Watson, J. R.

1991. May/June 29(3):15.

1991. Mar/Apr 29(2):1.

1991. Mar/Apr 29(2):11-13.

1991. Jan/Feb 29(1):19.

1990. July/Aug 28(4):16.

1990. May/June 28(3):6-7.

1990. Mar/Apr 28(2):1.

1990. Mar/Apr 28(2):24-26.

1989. Mar/Apr 27(2):1.

1989. Mar/Apr 27(2):9-12.

1988. July/Aug 26(4):16-17.

1988. May/June 26(3):6-8.

1988. Mar/Apr 26(2):1.

1988. Mar/Apr 26(2):6-7.

1987. Mar/Apr 25(2):1.

1987. Mar/Apr 25(2):13-16.

1986. Mar/Apr 24(2):1.

1986. Mar/Apr 24(2):26.

1985. Mar/Apr 23(2):1.

1985. Mar/Apr 23(2):29.

1984. May/June 22(3):13.

1984. May/June 22(3):13.

1984. Mar/Apr 22(2):1.

1984. Mar/Apr 22(2):2-3.

1984. Jan/Feb 22(1):13.

1983. Mar/Apr 21(2):1.

1983. Jan/Feb 21(1):12-13.

Anonymous

Anonymous

Anonymous

Hoos, Donald D.

Anonymous

Anonymous

1982. July/Aug 20(4):8.

1982. July/Aug 20(4):13.

1982. Mar/Apr 20(2):1.

1982. Mar/Apr 20(2):27-29.

1982. Jan/Feb 20(1):13.

1981. Mar/Apr 19(1):1.

Horrell, Stephen J.

1980. May/June 18(3):12-13.

Anonymous

Anonymous

Snyder, Arthur A.

Graffis, Herb

Anonymous

Anonymous

1980. May/June 18(3):7.

1980. May/June 18(3):8-9.

1980. May/June 18(3):12-13.

1980. May/June 18(3):13.

1980. May/June 18(3):14.

1980. Mar/Apr 18(2):1-3.

Article Title**Author****Year. Issue Volume(no.):pg.****GREEN SECTION INFORMATION & AWARDS (continued)**

Remarks by USGA President Frank D. Tatum, Jr.	Tatum, Frank D.	1980. Mar/Apr 18(2):3.
Arthur A. Snyder, 19th Recipient of USGA Green Section Award	Anonymous	1979. Mar/Apr 17(2):1.
Golf Course Maintenance and Management — The USGA's Role	Radko, Alexander M.	1978. Sept/Oct 16(5):1-4.
Where Do We Go From Here?	Anonymous	1978. May/June 16(3):9-10.
Dr. Jesse A. DeFrance, 18th Recipient of USGA	Anonymous	1978. Mar/Apr 16(2):1.
Green Section Award	Anonymous	
Edward F. Casey, 17th Recipient of USGA Green Section Award	Anonymous	1977. Mar/Apr 15(2):1.

IRRIGATION*Winged Foot Golf Club, New York*

Another Look - Turf and Salinity	Horst, Garald	1991. July/Aug 29(4):11-13.
Winter Water Wagons Minimize Dakota Desiccation	Latham, James M.	1991. Mar/Apr 29(2):17.
Protecting Pumps and Tees	Moraghan, Tim	1991. Mar/Apr 29(2):19-20.
Save Water — Automatically!	Moore, James F.	1991. Mar/Apr 29(2):20-21.
Sprinkler Uniformity Evaluation	Vermeulen, Paul	1991. Mar/Apr 29(2):30.
Sometimes Successful Agronomy Means Starting Over	Vermeulen, Paul	1989. July/Aug 27(4):1-4.
Water for Golf Course Use: The Next 20 Years and Beyond	Meyer, J. L.	1989. May/June 27(3):15-16.
Pumping and Coring	Moore, James F.	1989. Mar/Apr 27(2):34-35.
Improve Your Timing	O'Brien, Patrick M.	1989. Mar/Apr 27(2):36.
Putting the Water Puzzle Together	O'Brien, Patrick M. & E. A. Brown	1989. Jan/Feb 27(1):1-4.
The Art of Handwatering	Sayre, Gary	1988. July/Aug 26(4):13-15.
'Hi Tech' Can't Replace 'Common Sense'	Moore, James F.	1988. Mar/Apr (26)(2):4.
You Can Grow Better Turf — With Less Frequent Watering	Miller, Edward J.	1988. Mar/Apr 26(2):11-12.
1987: The Season in Review	Zontek, S. J., J. T. Snow, G. A. Watschke, J. M. Latham, P. M. O'Brien, J. H. Foy, J. F. Moore & L. W. Gilhuly	1987. Nov/Dec 25(6):7-12.
Answering the Most-Asked Questions About the Golf Course Pump Station	McLain, Keith	1987. Sept/Oct 25(5):10-13.
Managing Anaerobic Soils	Goss, Roy L.	1987. July/Aug 25(4):12-13.
Seeing the Unseen	Foy, John H.	1987. Mar/Apr 25(2):5.
So You Think You Understand Automatic Irrigation	Wagoner, Clifford A.	1987. Mar/Apr 25(2):6.
The C-S-T-M Factor [common sense turf management]	Zontek, Stanley J.	1987. Mar/Apr 25(2):24-25.
A Supplemental Irrigation System for Putting Greens	O'Brien, Patrick M.	1987. Mar/Apr 25(2):34.
Southeastern Region [season in review]	White, Charles B. & J. H. Foy	1986. Nov/Dec 24(6):11-12.
Can We Cope With Salty Water?	Peacock, Charles H.	1986. July/Aug 24(4):6-7.
Ideas — Philosophical and Practical	Moore, James F.	1986. Mar/Apr 24(2):31.
Selling An Irrigation System	Walsh, Ed	1985. July/Aug 23(4):7-9.
Drought Emergency Planning: Philadelphia Association of Golf Course Superintendents Responds	Smith, Michael R.	1985. May/June 23(3):11-13.
Irrigation - How Much is Too Much?	Snow, James T.	1983. July/Aug 21(4):6-8.
For Good Golf and Good Turf — Use Less Water	Zoller, John A.	1983. Mar/Apr 21(2):22-24.
Irrigation — The Hidden Story	White, Charles B.	1982. May/June 20(3):1-5.

Article Title**Author****Year. Issue Volume(no.):pg.****IRRIGATION (continued)**

Water, Water, Everywhere?	O'Brien, Patrick M.	1982. Mar/Apr 20(2):4-5.
Salt Injury — An Increasing Problem	Hoos, Donald D.	1981. Nov/Dec 19(6):1-3.
Technological Considerations for Automatic Irrigation	Hawes, Douglas T.	1981. July/Aug 19(4):4-7.
Effective Use of Our Natural Resources	Lucas, Melvin B., Jr.	1981. Mar/Apr 19(2):5-6.
Water Use and Energy Conservation	White, Charles B.	1981. Mar/Apr 19(2):29.
The Changing Scene	Anonymous	1980. May/June 18(3):A10-A11.
Fertigation	Sincerbeau, Scott A.	1979. May/June 17(3):10-12.
Questionnaire on Recycled Water	Anonymous	1979. May/June 17(3):13.
Water — U.S.A.	Watson, J. R.	1979. Mar/Apr 17(2):2-4.
Water and Turfgrass Growth	Spomer, L. Art	1979. Mar/Apr 17(2):5-7.
Maximum Use of Land Sites — Emphasis Water Management	Jones, Rees L.	1979. Mar/Apr 17(2):8-10.
Water Management	Cleaver, George W.	1979. Mar/Apr 17(2):14-15.
Irrigation Affects Species Predominance	Snow, James T.	1979. Mar/Apr 17(2):21-22.
Water Effects on Turfgrass Wear	Schwartzkopf, Carl H.	1979. Mar/Apr 17(2):23-24.
Irrigation Affects Budget	Hoos, Donald D.	1979. Mar/Apr 17(2):25-27.
How Water Behaves in the Soil	Hawes, Douglas T.	1979. Mar/Apr 17(2):28-29.
Current Review of Sewage Effluent for Irrigation Use	Dudeck, A. E.	1978. July/Aug 16(4):5-9.
Water Management Affects Playability — A Panel Discussion	Zontek, Stanley J., J. Rhodenbaugh, J. Zoller, E. Horton & W. Brewer	1978. Mar/Apr 16(2):22-25.
Water Conservation at Oakland Hills Country Club	Woehrle, Ted W.	1978. Jan/Feb 16(1):6.
The Drought in Northern California	Jagur, Jack	1977. July/Aug 15(4):13.
Irrigation — A Most Important Key on Your Success Chain	Bengeyfield, W. H.	1977. May/June 15(3):1-3.
Some Agronomic Aspects of Turf Fertilization	Snyder, G. H. & E. O. Burt	1977. May/June 15(3):10-12.
Great Golf Courses of America — Their Irrigation Systems [panel discussion]	Flaherty, J. R., C. E. Gipson & S. J. Zontek	1977. Mar/Apr 15(2):20-22.

PEST CONTROL**DISEASE**

The Season in Review

Zontek, S. J.,
J. T. Snow,
G. A. Watschke,
J. M. Latham,
P. M. O'Brien,
J. H. Foy, J. F. Moore
& L. W. Gilhuly

1987. Sept/Oct 25(6):7-12.

Seeing the Unseen
Mid-Atlantic Region [season in review]
Northeast Region [season in review]Foy, John H.
Zontek, Stanley J.
Snow, James T. &
G. A. Watschke1987. Mar/Apr 25(2):5.
1986. Nov/Dec 24(6):8.
1986. Nov/Dec 24(6):9-10.

Article Title	Author	Year, Issue Volume(no.):pg.
PEST CONTROL (continued)		
DISEASE (continued)		
Pythium-Induced Root Dysfunction of Creeping Bentgrass on High Sand Content Greens	Hodges, Clinton F.	1985. Sept/Oct 23(5):11-13.
Recent Insights on the Nature and Control of Corticum Red Thread	Couch, Houston B.	1983. Nov/Dec 21(6):8-11.
I've Never Seen THAT Before! <i>Sclerotium rolfsii</i> Blight on Golf Greens	Unruh, Tom & Z. Punja	1982. Jan/Feb 20(1):8-10.
The Nature and Control of Decline and Dying-Out of Toronto C-15 Bentgrass - A Progress Report	Couch, H. B.	1981. Nov/Dec 19(6):4-7.
Spring Deadspot of Bermudagrass	Lucas, Leon T.	1980. May/June 18(3):4-6.
Leaf Blight and Crown Rot of Toronto Creeping Bentgrass	Larsen, Philip O.	1979. May/June 17(3):5-7.
Disease Resistance and Quality of Bentgrasses in Washington State	Gould, C. J., R. L. Goss, A. G. Law & B. Ashworth	1978. Jan/Feb 16(1):7-10.
Everything You've Always Wanted to Know About Fairy Rings (But Were Afraid to Ask)	Schwartzkopf, Carl	1978. Jan/Feb 16(1):7-10.
Soil Microorganisms and Preventive Fungicide Programs — What are the Interactions?	Mazur, A. R.	1977. May/June 15(3):4-5.
INSECTS & NEMATODES		
Beneficial Turfgrass Invertebrates	Vavrek, Robert C.	1990. Nov/Dec 28(6):7-9.
Mole Cricket Management vs. Control	Burton, Tom	1989. Jan/Feb 27(1):10-11.
The Nematode Problem in New England	Swier, Stanley R.	1987. July/Aug 25(4):4-6.
Does Lime Control Japanese Beetle Grubs in Turf?	Vittum, P. J.	1984. Jan/Feb 22(1):6-8.
Parasitic Nematode Found in Annual Bluegrass Greens	Costello, Larry	1983. Jan/Feb 21(1):9-11.
The Bermudagrass Stunt Mite	Reinert, James A.	1982. Nov/Dec 20(6):9-12.
Creeping Bentgrass & Sod Webworm Larvae	Kneebone, W. R.	1977. Jan/Feb 15(1):12-13.
WEEDS		
Hoelon — A New Tool for Goosegrass Control	McCarty, L. B.	1990. May/June 28(3):8-9.
A Selective Annual Bluegrass Control — Finally!	Branham, B. E.	1990. Jan/Feb 28(1):6-8.
Use of Fenarimol for Selectively Controlling <i>Poa annua</i> in an Overseeded Bermudagrass Golf Green	Menn, Wallace G.	1986. Sept/Oct 24(5):11-12.
Encroachment of Bermudagrass into Bentgrass Greens	Johnson, B. J. & R. N. Carrow	1989. Nov/Dec 27(6):9-12.
A Rolling Stone . . . and Healthy Turf [moss control]	Snow, James T.	1984. Nov/Dec 22(6):7-9.
Those Irrepressible, Incredible, Impossible Grassy Weeds!	Batten, Steve M.	1984. Sept/Oct 22(5):1-4.
Growth Regulators — New Tools For the '80s	Batten, Steve M.	1983. May/June 21(3):1-3.
Herbicide Approach for Weeds	Johnson, B. J.	1979. Jan/Feb 17(1):6-10.
Goosegrass	Moncrief, James B.	1978. Sept/Oct 16(5):12-13.
INTEGRATED, ALTERNATIVE AND OTHER		
Monitoring for Improved Golf Course Pest Management Results	Skorulski, James E.	1991. Sept/Oct 29(5):1-5.
Encroachment of Bermudagrass Into Bentgrass Greens	Johnson, B. J. & R. N. Carrow	1989. Nov/Dec 27(6):9-12.
Gassing and Regrassing	Walker, Tom	1989. July/Aug 27(4):10-12.
Integrated Pest Management — A Different Approach for the Same Old Problems	Foy, John H.	1988. Sept/Oct 26(5):9-11.
Seeing the Unseen	Foy, John H.	1987. Mar/Apr 25(5):5.
Porcupine Damage?	Stroike, Leon	1984. Jan/Feb 22(1):9.
Growth Regulators — New Tools for the '80s?	Batten, Steve M.	1983. May/June 21(3):1-3.
The Purple Martin	O'Kelly, James S.	1980. May/June 18(3):10-11.
Golf Course Aviary and Animal Problems	Schwartzkopf, Carl H.	1979. July/Aug 17(4):5-7.

PONDS*Medinah Country Club, Illinois*

Pond Vegetation from a Positive Perspective

A Different Look at IPM

Banking On Beauty

Tiny Bubbles Keep Small Ponds Alive

Limestone and Algae Control at Bill Bryant Lake

Gabions — Their Applications on the Golf Course

Avoiding the Ugly Pond

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1991. Sept/Oct 29(5):15-16.

1990. Sept/Oct 28(5):1-6.

1988. Mar/Apr 26(2):2-3.

1988. Mar/Apr 26(2):36-37.

1984. Jan/Feb 22(1):10-12.

1982. Sept/Oct 20(5):9-11.

1982. Jan/Feb 20(1):1-4.

1979. Mar/Apr 17(2):8-10.

RESEARCH

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The USGA's Environmental Program

An Old Grass is Getting a New Look

Measuring Green Speed on Sloped Putting Greens

Comparing Hollow- and Solid-Tine Cultivation

Hoelon — A New Tool for Goosegrass Control
Heat Shock Protein Synthesis in Turfgrass

A Selective Annual Bluegrass Control — Finally!
Maintaining Adequate Phosphorus Levels in Sand Greens
Encroachment of Bermudagrass into Bentgrass Greens

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Does Fertilizer/Pesticide Use on a Golf Course Put
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Johnson, B. J. &

R. N. Carrow

Krans, Jeffrey V.

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S. Harrison &

G. W. Hamilton

1991. May/June 29(3):12-14.

1991. Mar/Apr 29(2):11-13.

1991. Jan/Feb 29(1):6-9.

1990. Nov/Dec 28(6):10-12.

1990. Sept/Oct 28(5):7-10.

1990. May/June 28(3):8-9.

1990. July/Aug 28(4):13-15.

1990. Jan/Feb 28(1):6-8.

1989. Nov/Dec 27(6):5-6.

1989. Nov/Dec 27(6):9-12.

1989. July/Aug 27(4):7-9.

1989. May/June 27(3):5-8.

Article Title**Author****Year. Issue Volume(no.):pg.****RESEARCH (continued)**

The USGA/GCSAA Research Program: Receiving and Disbursing Research Funds	Watson, J. R.	1989. Mar/Apr 27(2):9-12.
NuMex Sahara — A New Seed-Propagated Bermudagrass Low-Water-Use Turfgrasses	Baltensperger, Arden Beard, James B. & K. S. Kim	1989. Jan/Feb 27(1):5-6. 1989. Jan/Feb 27(1):12-13.
A Report on New Grasses Being Developed for Golf Drought Resistance Comparisons Among Major Warm-Season Turfgrasses	Gibeault, Victor A. Kim, K. S., J. B. Beard & S. I. Sifers	1988. Nov/Dec 26(6):5-7. 1988. Sept/Oct 26(5):12-15.
A Look at Turfgrass Water Conservation	Carrow, Robert N.	1988. July/Aug 26(4):7-9.
The USGA Turfgrass Information File Goes On-Line August 1, 1988	Anonymous	1988. July/Aug 26(4):16-17.
The USGA-GCSAA Research Program at the Halfway Point	Bengeyfield, William H.	1988. Mar/Apr 26(2):6-7.
USGA/GCSAA Coordinated Effort Means Successful Research Funding	Prusa, James G.	1988. Mar/Apr 26(2):8-10.
Water Movement in Soils	Gardner, Walter H.	1988. Mar/Apr 26(2):23-27.
The Honor Roll [contributors to research]	Anonymous	1987. Mar/Apr 25(2):13-16.
Biotechnology and Turfgrass Research: A Glimpse Into the Future	McKell, Cyrus M.	1987. Mar/Apr 25(2):17-20.
The Future of Turfgrass Management and Underground Water Quality	Watschke, T. L.	1986. Sept/Oct 24(5):6-7.
Use of Fenarimol for Selectively Controlling <i>Poa annua</i> in an Overseeded Bermudagrass Golf Green	Menn, Wallace G.	1986. Sept/Oct 24(5):11-12.
Can We Cope With Salty Water?	Peacock, Charles H.	1986. July/Aug 24(4):6-7.
A World of Information Awaits Your Call	Bengeyfield, William H.	1986. May/June 24(3):12-13.
Research — Pulling Together, Not Apart	Watson, James R.	1986. Mar/Apr 24(2):10-13.
A Bermudagrass Primer and the Tifton Bermudagrasses	Hanna, Wayne W.	1986. Jan/Feb 24(1):11-13.
Quality Turf in the Natural Environment — Enhanced Through Genetic Improvement	Engelke, M. C.	1985. Nov/Dec 23(6):5-7.
Pythium-Induced Root Dysfunction of Creeping Bentgrass on High Sand Content Greens	Hodges, Clinton F.	1985. Sept/Oct 23(5):11-13.
Potassium — A Miracle Element?	Shearman, Robert C.	1985. July/Aug 23(4):5-6.
Now Open: The Turfgrass Information Center	Chapin, Richard E. & Peter LePoer	1985. May/June 23(3):9-10.
With Vital Commitment To the Future	Timmerman, James W. & J. G. Prusa	1985. Mar/Apr 23(2):2-4.
Give the Ball a Push	Anonymous	1985. Mar/Apr 23(2):5-7.
Growth of Bentgrass as Affected by Nitrogen, Soil pH and Age of Stand	Pepper, Ian L. & W. R. Kneebone	1984. May/June 22(3):10-12.
Mr. Superintendent — Mr. Green Chairman: Here's One Way to Improve More Than Your Lie!	Anonymous	1984. May/June 22(3):13.
Fresh From the Drawing Board	Bengeyfield, William H.	1984. Mar/Apr 22(2):2-3.
Golf Keeps America Beautiful and How You Can Help	Russell, B. P.	1984. Mar/Apr 22(2):23-25.
Does Lime Control Japanese Beetle Grubs in Turf?	Vittum, P. J.	1984. Jan/Feb 22(1):6-8.
Update on the Green Section's Turfgrass Research Committee	Bengeyfield, William H.	1984. Jan/Feb 22(1):13.
Golf Shoe Study II	Gibeault, Victor A., V. B. Youngner & W. H. Bengeyfield	1983. Sept/Oct 21(5):1-7.
Exploration for Zoysiagrass in Eastern Asia	Murray, J. Jack & M. C. Engelke	1983. May/June 21(3):8-12.
Recent Turfgrass Plant Explorations in Africa	Beard, James B. & J. R. Watson	1982. July/Aug 20(4):6-8.
The Green Section's New Turfgrass Research Committee	Anonymous	1982. July/Aug 20(4):13.
The Art of Yesterday — The Science of Today	Bengeyfield, William H.	1982. Mar/Apr 20(2):2-3.
Something Better in Grasses	Snow, James T.	1982. Mar/Apr 20(2):6-9.
The Nature and Control of Decline and Dying-Out of Toronto C-15 Bentgrass — A Progress Report	Couch, H. B.	1981. Nov/Dec 19(6):4-7.
Tifway II Bermudagrass Released	Burton, Glenn W.	1981. July/Aug 19(4):8.
Cool-Season/Warm-Season Turfgrass Management in the Transition Zone	Mazur, A. R.	1981. Nov/Dec 19(6):10-12.
The Toronto C-15 Bentgrass Syndrome	Radko, Alexander M.	1981. July/Aug 19(4):8.
Quality Playing Conditions — The Role of Research	Beard, James B.	1981. July/Aug 19(4):9-13.
The Necessity of the Two-Inch Sand Layer in Green Construction	Brown, K. W., J. C. Thomas & A. Almodares	1980. Nov/Dec 18(6):1-4.
Influence of the Sand Layer on Available Water Retention in a Golf Green	Brown, K. W. & J. C. Thomas	1980. Nov/Dec 18(6):5-7.
Turfgrass Improvement Through Cell Culture	Krans, Jeffrey V.	1980. Sept/Oct 18(5):8-10.
Spring Root Dieback of Warm-Season Turfgrasses	DiPaola, J. M. & J. B. Beard	1980. July/Aug 18(4):6-9.

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RESEARCH (continued)		
The Influence of Mowing Procedures on Roll Speed of Putting Greens	Engel, R. E., Radko, A. M. & J.R. Trout	1980. Jan/Feb 18(1):7-9.
Electrostatic Spraying of Turfgrass	Anantheswaran, R. C. & S. E. Law	1979. Nov/Dec 17(6):1-4.
Penneagle Creeping Bentgrass	Duich, J. M.	1979. July/Aug 17(4):8-10.
Disease Resistance and Quality of Bentgrasses in Washington State	Gould, C. J., R. L. Goss, A. G. Law, & B. Ashworth	1978. Sept/Oct 16(5):5-11.
New Zealand - Turfgrass Management in an Incredible Land "Iron Byron" Sets Distance Standards	Benneyfield, W. H.	1978. July/Aug 16(4):10-12.
The Search for Better Grasses	Thomas, Frank W.	1978. Mar/Apr 16(2):5-7.
Better Turf Means Better Golf: The Bermudagrasses — Past, Present & Future	Youngner, Victor B.	1978. Mar/Apr 16(2):15-19.
The Outlook for Turf	Burton, Glenn W.	1977. Mar/Apr 15(2):5.
Nitrogen Losses from Golf Greens	Moncrief, James B.	1977. Jan/Feb 15(1):1-5.
Creeping Bentgrass & Sod Webworm Larvae	Brown, K. W., R. L. Duble & J.C. Thomas	1977. Jan/Feb 15(1):5-7.
	Kneebone, W. R.	1977. Jan/Feb 15(1):12-13.

ROUGHS



National Golf Links of America, New York

An Old Grass is Getting a New Look	Riordan, Terry	1991. Jan/Feb 29(1):6-9.
An Overseeding Alternative — Roughs Only	Vermeulen, Paul	1989. Mar/Apr 27(2):17.
Roughing It	Snow, James T.	1988. Nov/Dec 26(6):1-4.
Should Carts Ride the Fairways?	Snow, James T.	1987. May/June 25(3):9-11.
Northeast Region [season in review]	Snow, James T.	1986. Nov/Dec 24(6):9-10.
Bent/ <i>Poa</i> Roughs . . . Another Look	Byers, Richard P.	1986. Sept/Oct 24(5):8-10
Rough Times	O'Brien, Patrick M.	1986. Mar/Apr 24(2):5-6.
Turf-Type Tall Fescues Are Here!	O'Brien, Patrick M. & R. Hurley	1986. Jan/Feb 24(1):1-5.
The Natural Look	Voykin, Paul D.	1983. Mar/Apr 21(3):6-7.
Bent- <i>Poa</i> Roughs . . . A Modern Dilemma	Snow, James T.	1982. Nov/Dec 20(6):6-8.
Buffalograss — A "New" Turfgrass for Golf Courses?	Borland, Dorothy Falkenberg & J. D. Butler	1982. Sept/Oct 20(5):6-8.
Gabions — Their Applications on the Golf Course	Drew, John	1982. Sept/Oct 20(5):9-11.
Let's Waste a Little More	Silva, Brian	1982. Mar/Apr 20(2):18-20.
Avoiding the Ugly Pond	Ansett, Timothy G.	1982. Jan/Feb 20(1):1-4.
Maintenance by Priority	White, Charles B.	1981. May/June 19(3):1-3.
Through the Green	Schwartzkopf, Carl H.	1981. Jan/Feb 19(1):1-4.
The Changing Scene	Anonymous	1980. May/June 18(3):10-11.

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 A Revival of Hand Raking?
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- Gilhuly, Larry
 Snow, James T.
 Snow, James T.
 Snow, James T.
 Snow, James T.
 Gilhuly, Larry W.
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 Snow, James T.
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 & M. H. Ferguson
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 Snow, James T.
 Zontek, Stanley J.
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 & C. Schwartzkopf
1990. Mar/Apr 28(2):34-35.
 1990. Jan/Feb 28(1):1-5.
 1989. Sept/Oct 27(5):9-13.
 1989. Mar/Apr 27(2):19.
 1988. May/June 26(3):1-3.
 1988. Mar/Apr 26(2):19.
 1988. Mar/Apr 26(2):20.
 1986. Mar/Apr 24(2):16-17.
 1985. May/June 23(3):6-8.
 1985. Jan/Feb 23(1):7.
 1984. July/Aug 22(4):9-11.
 1983. Nov/Dec 21(6):1-4.
 1983. May/June 21(3):6-7.
 1981. Sept/Oct 19(5):1-5.
 1981. Mar/Apr 19(2):18.
 1980. May/June 18(3):12-13.
 1980. Mar/Apr 18(2):5-6.
 1978. Nov/Dec 16(6):10-12.
 1977. Mar/Apr 15(2):23-25.

SOILS

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- Horst, Garald
 Oatis, David
 Murphy, J. A. &
 P. E. Rieke
 Latham, James M.
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 Latham, James M.
 Gardner, Walter H.
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 Bengeyfield, William H.
 Moore, James F.
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 Gockel, Judith Ferguson
 Anonymous
 Ferguson, Marvin H.
 White, Charles B.
 Bengeyfield, William H.
1991. July/Aug 29(4):11-13.
 1991. Mar/Apr 29(2):5.
 1990. Sept/Oct 28(5):7-10.
 1990. May/June 28(3):1-5.
 1989. July/Aug 27(4):1-4.
 1989. July/Aug 27(4):4-7.
 1988. Mar/Apr 26(2):23-27.
 1987. Sept/Oct 25(5):1-4.
 1987. Sept/Oct 25(5):5-7.
 1987. July/Aug 25(4):12-13.
 1987. Mar/Apr 25(2):9-11.
 1987. Mar/Apr 25(2):33.
 1986. Nov/Dec 24(6):5-7.
 1986. Mar/Apr 24(2):7-9.
 1985. Mar/Apr 23(2):11.
 1983. Mar/Apr 21(2):18-21.
 1982. Sept/Oct 20(5):1-5.
 1982. Mar/Apr 20(2):2-3.

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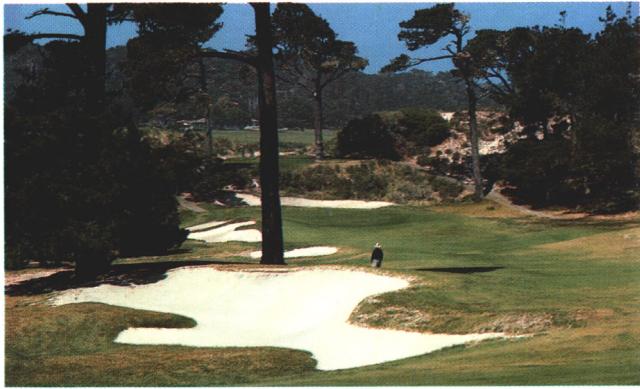
Salt Injury — An Increasing Problem	Hoos, Donald D.	1981. Nov/Dec 19(6):1-3.
Management for Better Roots	Hawes, Douglas T.	1981. Nov/Dec 19(6):8-9.
Putting Green Responses to Sand and Sand/Soil Topdressing	Cooper, R. J. & C. R. Skogley	1981. May/June 19(3):8-13.
Soils of the Southwest	Hawes, Douglas T.	1981. Mar/Apr 19(2):19-20.
Soil Temperature and Related Fairway Management Practices — Northern Turfgrasses	Miles, Oscar L.	1980. Mar/Apr 18(2):26-29.
Play a Round on a Volcano!	Hoos, Donald D.	1979. Nov/Dec 17(6):5-8.
Nutrients Affect Color and Vigor of Turfgrasses	Buchanan, William G.	1979. Mar/Apr 17(2):18-20.
How Water Behaves in the Soil	Hawes, Douglas T.	1979. Mar/Apr 17(2):28-29.
Soil Testing for Turfgrasses	Turner, Thomas R.	1978. May/June 16(3):6-8.
Principles of Soil Preparation for Drained Golf Greens	Spomer, L. Art	1977. July/Aug 15(4):9-12.
Soil Microorganisms and Preventive Fungicide Programs — What are the Interactions?	Mazur, A. R.	1977. May/June 15(3):4-5.

SUPERINTENDENT ISSUES

Liability on the Golf Course	Veron, J. Michael	1990. Sept/Oct 28(5):10-14.
Patience, Gentlemen, Patience	Oatis, David A.	1990. May/June 28(3):13.
Backing Into Professionalism	Metsker, Stan	1990. Mar/Apr 28(2):9.
Superintendent and Pro: Build a Constructive Relationship	Moraghan, Tim	1990. Jan/Feb 28(1):16.
Taking a Look at the Whole Picture	Connolly, James	1989. Nov/Dec 27(6):7-8.
Two Perspectives On: "Help Wanted — Career Opportunities": Guidelines for the Superintendent	Moore, James F.	1989. May/June 27(3):1-4.
Guidelines for the Club		
What They Don't Teach in Turf Schools	Johns, James A.	1989. Mar/Apr 27(2):8-9.
Injuries on the Golf Course — Do You Know What to Do?	Couchman, Glen	1988. Sept/Oct 26(5):6-8.
Snake Oils	Moore, James F.	1988. May/June 26(3):13.
Joining Efforts to Bring the Course Up to Par	Laupheimer, John D.	1988. Mar/Apr 26(2):32-33.
For the Golf Course Superintendent There's a Time to Hold — and a Time to Fold	Stottern, Riley	1987. Mar/Apr 25(2):26-27.
Working Nine to Five?	White, Charles B.	1986. Nov/Dec 24(6):1-4.
Golf Course Safety — Pay Attention Now or Pay (And Pay) Later	Latham, James M.	1986. July/Aug 24(4):8-10.
The Amateur Golfer and The Superintendent — Golf's Ultimate Partnership	Tatum, Frank D., Jr.	1986. Mar/Apr 24(2):27-30.
There Is More to the Job Than Just Growing the Grass	Zontek, Stanley J.	1986. Mar/Apr 24(2):33.
Selling an Irrigation System	Walsh, Ed	1985. July/Aug 23(4):7-9.
The Member and Superintendent Relationship: Complainin' and Explainin'	Gilhuly, Larry W.	1985. May/June 23(3):1-5.
What Am I, Chopped Liver?	Quast, Danny H.	1985. Mar/Apr 23(2):14-16.
The More Information We Pass On — The Less We Have to Communicate!	Luijs, Joe	1985. Mar/Apr 23(2):16-18.
Our Business is Golf Course Maintenance	Green, David E.	1985. Mar/Apr 23(2):18-19.
Some Committee Questions That Come to Mind	Budd, Eli	1985. Mar/Apr 23(2):20.
Lead, Follow or Get Out of the Way	Hearn, Donald E.	1984. Mar/Apr 22(2):6-7.
I Need a Secretary!	Hawes, Douglas T.	1984. Mar/Apr 22(2):10-11.
Who Sets the Standards for Play on Your Golf Course?	Osterman, Robert W.	1984. Mar/Apr 22(2):12-14.
The Image Game	Gee, Bobbie	1984. Mar/Apr 22(2):15-22.
Some Qualities of Great Golf Course Superintendents	Hand, James R.	1984. Mar/Apr 22(2):26-29.
Training for Today's and Tomorrow's Golf Course Superintendents	DuBose, Harry M.	1983. July/Aug 21(4):9-10.
The Game — and the Golf Course Superintendent	Campbell, William C.	1983. Mar/Apr 21(2):8-9.
Vandalism: Is There Any Answer?	Moncrief, James B.	1982. July/Aug 20(4):1-5.
A Secretary for the Golf Course Superintendent — The Need Is Great!	Bator, Richard	1982. July/Aug 20(4):11-12.
Getting Ready for Summer: Lightning Alert	Gray, Dick	1982. May/June 20(3):13.
A Golf Course Superintendent's Role in Good Golfing Turf	Bavier, Michael	1982. Mar/Apr 20(2):10-11.
Quality Playing Conditions and Priorities (A Suggested Guide When Starting a New Job)	Horton, Edward C.	1981. Mar/Apr 19(2):7-9.
Membership Questionnaires — Find Out Where You Really Stand	Stark, William B. & W. Brewer	1981. Jan/Feb 19(1):5-8.
Ay, There's The Rub [responsibility]	Brewer, William S.	1980. Jan/Feb 18(1):4-6.
The Golf Course Superintendent — The Man Who Maintains Turfgrass Standards	Buchanan, William G.	1978. July/Aug 16(4):1-4.
Thoughts From One Superintendent's Wife — To Another	Twombly, Caroline C.	1977. May/June 15(3):9-10.
The Invisible Men	Bisher, F. Furman	1977. Mar/Apr 15(2):28-29.

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Just One More Little Crisis	Pierson, Dan	1991. May/June 29(3):5-8.
Protecting Pumps and Tees	Moraghan, Tim	1991. Mar/Apr 29(2):19-20.
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"Home On the Range"	Gilhuly, Larry	1989. Mar/Apr 27(2):2-3.
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Dealing With Divots	O'Brien, Patrick M.	1984. Nov/Dec 22(6):10-12.
Nursery Rhymes [turfgrass nurseries]	White, Charles B.	1983. Sept/Oct 21(5):8-10.
Tee Markers Can Be Distinctive	Hawes, Douglas T.	1983. July/Aug 21(4):11-13.
Practice Ranges — Are They Neglected?	Brewer, William S.	1982. Jan/Feb 20(1):11-13.
The Changing Scene	Anonymous	1980. May/June 18(3):10-11.
Tee Alignment: Don't Overlook It	Zontek, Stanley J.	1977. July/Aug 15(4):6-8.

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Learning to Live with Golf Cart Traffic	Gast, Chuck	1991. Sept/Oct 29(5):9-11.
Reducing Traffic Wear	Vermeulen, Paul H.	1990. Mar/Apr 28(2):20.
Curbing Those Carts	Foy, John H.	1989. Mar/Apr 27(2):4.
Artificial Surfaces for the Golf Course	O'Brien, Patrick M.	1988. Mar/Apr 26(2):34-35.
Politics, Religion, and Winter Play on Greens	Snow, James T.	1987. Nov/Dec 25(6):1-4.
Should Carts Ride the Fairways?	Snow, James T.	1987. May/June 25(3):9-11.
Chips 'n' Dips	Gilhuly, Larry W.	1987. Mar/Apr 25(2):4.
Oh Traffic: Oh Clippings: Oh Stumps!	White, Charles B.	1987. Mar/Apr 25(2):23-24.
Golf Shoes and Turf Wear — A Story That Won't Go Away!	Bengeyfield, William H.	1985. July/Aug 23(4):12.
Golf Shoe Study II	Gibeault, Victor A., V. B. Youngner & W. H. Bengeyfield	1983. Sept/Oct 21(5):1-7.
The Winter Golfers Cometh	O'Leary, Paul W.	1982. Nov/Dec 20(6):4-5.
Golf Path Curbing	Zontek, Stanley J.	1981. May/June 19(3):4-5.
The Triplex "Ring"	Snow, James T.	1980. Nov/Dec 18(6):12-14.
Bruised, Battered, and Bare	Hoos, Donald D.	1980. May/June 18(3):1-3.
Water Effects on Turfgrass Wear	Schwartzkopf, Carl H.	1979. Mar/Apr 17(2):23-24.
<i>Poa annua</i> — It Won't Go Away!	Goss, Roy L.	1978. Mar/Apr 16(2):26-29.
Roads Extend the Life of Turf and the Golf Car	Moncrief, James B.	1977. Nov/Dec 15(6):1-4.
Great Golf Courses of America — Their Paths and Roads	Green Section Staff	1977. Mar/Apr 15(2):26-28.

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Modern Tree Management Techniques for Today's Turf Manager	O'Brien, P. M. & K. A. Knox	1991. Jan/Feb 29(1):1-5.
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Ten Timely Tips to Avoid Tree Troubles	Vermeulen, Paul	1990. Sept/Oct 28(5):15-17.
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The Fall Harvest [tree removal]	Snow, James T.	1990. Mar/Apr 28(2):18-19.
Aerial Hazards	O'Brien, Patrick M.	1989. July/Aug 27(4):13.
Oh Traffic: Oh Clippings: Oh Stumps!	White, Charles B.	1987. Mar/Apr 25(2):23.
The Monsters of Manchester	Watschke, Gary A.	1986. Sept/Oct 24(5):1-5.
Aerial Photography and Maintenance Mapping	Watschke, Gary A.	1986. Mar/Apr 24(2):32.
Shady Characters	White, Charles B.	1985. July/Aug 23(4):1-4.
Trees, Trees Everywhere	Snow, James T.	1984. Jan/Feb 22(1):1-5.
Porcupine Damage?	Stroike, Leon	1984. Jan/Feb 22(1):9.
Drip Irrigation for Establishing and Maintaining Trees	Clemans, Don	1981. May/June 19(3):6-7.
A Guide to Using Trees on the Golf Course	Snow, James T.	1980. July/Aug 18(4):1-5.
The Flowers on The Hills of Industry [hyroseeding]	Bengeyfield, William H.	1980. Jan/Feb 18(1):10-13.
"A Thing of Beauty is a Joy Forever"	Brewer, William S.	1978. May/June 16(3):11-13.
Trees — Try Something Different	Snow, James T.	1977. Sep/Oct 15(5):1-9.

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The Grass Doesn't Care	Carter, Barry	1991. July/Aug 29(4):5-8.
Say No to Posting [green speed]	Connolly, James	1990. Nov/Dec 28(6):17.
Liability on the Golf Course	Veron, J. Michael	1990. Sept/Oct 28(5):10-11.
What's Your Batting Average? An Opinion on Unreasonable Expectations	Zontek, Stanley J.	1990. Sept/Oct 28(5):17.
Glitz and Glamour Golf	Radko, Al	1990. July/Aug 28(4):17.
Those Were the Good Old Days!	Zontek, Stanley J.	1989. Nov/Dec 27(6):13.
New Zealand . . . The Grass Capital	Krans, Jeffrey V.	1989. July/Aug 27(4):7-9.
Just Hit It! [yardage markers]	Zontek, Stanley J.	1989. May/June 27(3):11-12.
1989 USGA Day	Moraghan, Tim P.	1989. Mar/Apr 27(2):5.
If It's Tuesday, This Must Be Ladies' Day	Bell, Judy	1988. Mar/Apr 26(2):28-31.
Let's See — My Rules of Golf Must be Here, Somewhere . . . It's in the Bag	Eberl, George	1987. Mar/Apr 25(2):11-12.
Helping the Blind to See	Snow, James T.	1987. Mar/Apr 25(2):21-22.
Rough Times	O'Brien, Patrick M.	1986. Mar/Apr 24(2):5-6.
The Amateur Golfer and the Superintendent — Golf's Ultimate Partnership	Tatum, Frank D.	1986. Mar/Apr 24(2):27-30.
Golf Keeps America Beautiful	Much, Sheridan	1985. Mar/Apr 23(2):8-11.
Keep the Course Properly Marked	Rainwater, Crawford	1985. Mar/Apr 23(2):13-14.
What Am I, Chopped Liver?	Quast, Danny H.	1985. Mar/Apr 23(2):14-16.
The Rules of Golf and the Golf Course Superintendent	Williams, William J.	1985. Mar/Apr 23(2):20-22.
Golf Shoes and Turf Wear — A Story That Won't Go Away!	Bengeyfield, William H.	1985. July/Aug 23(4):12.
Some (More) Thoughts on Putting Green Speed	Engel, Ralph E.	1984. Nov/Dec 22(6):5-6.
The Stimpmeter — A Perspective	Radko, Alexander M.	1984. Sept/Oct 22(5):12-13.
Why Don't the Greens Hold?	Buchanan, William G.	1984. July/Aug 22(4):1-5.
Turf Management in England and Scotland: So Similar, Yet So Different	Zontek, Stanley J.	1984. July/Aug 22(4):12-13.
Golf Shoe Study II	Gibeault, Victor A., V. B. Youngner & W. H. Bengeyfield	1983. Sept/Oct 21(5):1-7.
The Golf Course Superintendent and Maintaining the Integrity of the Course	Fleming, John	1983. Sept/Oct 21(5):11-13.
Quality Playing Conditions for the Public Golfer	Finamore, Steve	1983. May/June 21(3):4-5.
Golf Courses of the Future	Hannigan, Frank	1983. Mar/Apr 21(2):2-4.
How It All Began [stimprometer]	Thomas, Frank W.	1983. Mar/Apr 21(2):10-11.
A New Turf Menace	Albaugh, Julius	1983. Mar/Apr 21(2):11-12.
It's A Good Tool — Use With Caution and Restraint	Mitchell, Robert V.	1983. Mar/Apr 21(2):13-16.
Up With the Stimpmeter	Zontek, Stanley J.	1983. Mar/Apr 21(2):16-17.
To Live - Grass Must Be Green	Watson, J. R.	1983. Mar/Apr 21(2):25-27.
How Green is Green? How Brown is Brown? A Middle Approach	Cadenelli, Stephen G.	1983. Mar/Apr 21(2):27-28.
The Green Section's Stimpmeter: Most Think Friend - Some Think Enemy	Hoos, Donald D.	1982. July/Aug 20(4):9-10.
Marshaling the Forces of the National Golf Community	McLoughlin, James E.	1982. May/June 20(3):11-12.
Place the Emphasis on Playing Conditions	Buchanan, William G.	1982. Mar/Apr 20(2):14-15.
Golf Neglects the Idea That Made It Big	Graffis, Herb	1981. Sept/Oct 19(5):6-7.
Quality Playing Conditions for Every Day	Mitchell, Robert V.	1981. Mar/Apr 19(2):2-4.
The Challenge of Industry Hills	Bengeyfield, William H.	1981. Mar/Apr 19(2):23-24.
Little Things That Count	Brewer, William S.	1981. Mar/Apr 19(2):27-28.
The Stimpmeter — A Management Tool	O'Brien, Patrick M.	1981. Mar/Apr 19(2):28-29.

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Through the Green Membership Questionnaires — Find Out Where You Really Stand	Schwartzkopf, Carl H. Stark, William B. & W. Brewer	1981. Jan/Feb 19(1):1-4. 1981. Jan/Feb 19(1):5-8.
A Study of Putting Green Variability	Radko, A. M., R. E. Engel & R. J. Trout	1981. Jan/Feb 19(1):9-13.
Golf Course Observations from South America A Playing Comparison of British and American Courses Influence of Mowing Procedures on Roll Speed of Putting Greens	Moncrief, James B. Sigel, Jay Engel, R. E., A. M. Radko & J. R. Trout	1981. Jan/Feb 18(6):15-20. 1980. Mar/Apr 18(2):4. 1980. Jan/Feb 18(1):7-9.
Play a Round on a Volcano! A Golfer's View of Maintenance 1979 U.S. Open: Some Reflections Firm vs. Soft Playing Conditions The Stimpmeter and the Open The Golf Course Superintendent — The Man Who Maintains Turfgrass Standards	Hoos, Donald D. Berg, Tim Yoder, J. R. Black, Joe Thomas, Frank Buchanan, William G.	1979. Nov/Dec 17(6):5-8. 1979. Nov/Dec 17(6):9-12. 1979. Sept/Oct 17(5):12. 1979. Mar/Apr 17(2):11-13. 1978. Nov/Dec 16(6):7-9. 1978. July/Aug 16(4):1-4.
The Public Parks Golfer Deserves Something More Than Mediocre Golfing Turf! Requirements for Play — The Professional's View How Fast Are Your Greens? — An Update Water Management Affects Playability — A Panel Discussion	Bengeyfield, William H.	1978. May/June 16(3):1-5.
How Fast Are Your Greens? What Makes a Golf Course Great It's the Rub of the Green Great Golf Courses of America — Factors of Play Great Golf Courses and The Rules of Golf	Rhoads, Rick Radko, Alexander M. Zontek, Stanley J., J. Rhodenbaugh, J. Zoller, E. Horton & W. Brewer	1978. Mar/Apr 16(2):2-4. 1978. Mar/Apr 16(2):20-21. 1978. Mar/Apr 16(2):22-25.
	Radko, Alexander M. Brodnax, G. H. Buchanan, William G. Gabrielsen, James R. Dey, J. C.	1977. Sept/Oct 15(5):10-11. 1977. Mar/Apr 15(2):2-4. 1977. July/Aug 15(4):1-3. 1977. Mar/Apr 15(2):7-8. 1977. Mar/Apr 15(2):9-13.

WINTER CONCERN

Winter Water Wagons Minimize Dakota Desiccation	Latham, James M.	1991. Mar/Apr 29(2):17.
More Transition Zone Blues	Kenna, Mike	1989. Sept/Oct 27(5):6-8.
Politics, Religion, and Winter Play On Greens	Snow, James T.	1987. Nov/Dec 25(6):1-4.
Bermudagrass Management to Reduce Winter Injury — Pay Now or Pay Later	Chalmers, David R.	1986. May/June 24(3):8-10.
Ironize Your Course for the Winter	McGinnis, Paul	1986. Jan/Feb 24(1):10.
Shady Characters	White, Charles B.	1985. July/Aug 23(4):1-4.
Playing Par With Jack Frost	White, Charles B.	1984. Sept/Oct 22(5):8-11.
The Winter Golfers Cometh	O'Leary, Paul W.	1982. Nov/Dec 20(6):4-5.
Early Spring Greenup — Don't Push It	Snow, James T.	1982. May/June 20(3):6-8.
Putting Greens: Dealing With Snow and Ice Accumulations	Snow, James T.	1980. Jan/Feb 18(1):1-3.
Golf Course Aviary and Animal Problems	Schwartzkopf, Carl H.	1979. July/Aug 17(4):5-7.
Promoting Recovery from Winter Injury	Snow, James T.	1979. Jan/Feb 17(1):11-13.

TURF TWISTERS

DURING THE WINTER

Question: During the winter, many sprinkler heads on my golf course become lifted out of the ground due to frost heaving. It seems to be the same ones each year. I have tried back-filling around the head with sand, but that hasn't helped. Do you have any alternatives? (Maine)

Answer: Try covering each sprinkler head with one or two bales of hay. The hay helps insulate the soil and prevents heaving.

WORN HOLES

Question: I get a lot of pressure from our winter golfers (especially on weekends) to start play before the frost is off the greens. As if that isn't enough, I'm not allowed to establish temporary greens, and by spring the greens are very worn around the holes and are often rough and slow to recover. What can I do to get the golfers on the course more quickly in the morning, and what kind of measures can be taken to prevent the area around the holes from becoming worn from winter play? (Wisconsin)

Answer: Short of buying them a ticket to Florida, consider using geotextile covers for the first four or five greens (and perhaps a few shaded greens). By putting the covers on the evening before a heavy frost is predicted, you can prevent the frost from setting up on the greens. By the time the players get around to number five, the frost will probably have melted on the remaining greens.

As far as protecting the turfgrass itself, take a lesson from the folks out west. The greens are topdressed rather heavily *after* snowmold-preventing fungicides are applied in the late fall. To some degree, this provides protection to the crown or growing point of the turfgrass plant. At the Laurel Country Club (Laurel, Montana), no play is permitted when the putting surfaces are softened by a thaw, to prevent footprinting and damage to the turf. Their unique "kicker" is banning the use of spiked shoes for winter play. Wear around the holes is practically non-existent. Winter watering on warm days (over 32° F) also helps minimize desiccation during snowless periods.

NEED RELIEF

Question: After changing cup positions on the greens, scalping damage sometimes occurs on the plugs used to fill the previous day's hole. Scalping is particularly troublesome when the plugs swell after we irrigate the greens. To prevent this type of injury, I have instructed my employees to place the plugs slightly below the putting surface. This solution creates another problem, however, as the members insist they cannot gain relief. Is this true? (Arizona)

Answer: Yes. Rule 16-1c applies.