

Golf Course Expo Planned For Nov. 11-12 in Orlando

National Exhibition and Conference for Superintendents, Managers, Owners and Developers of Public-Access Golf Facilities

ORLANDO, Fla.—Golf Course Expo is scheduled for Nov. 11-12 here at the Orange County Convention Center. Sponsored by *Golf Course News*, the newspaper for the golf course industry, Golf Course Expo is the first exposition and conference devoted to public-access golf. It is designed specifically for the entire public-access management team—superintendents, owners, managers and developers of public-access golf facilities: daily fee, municipal, semi-private and resort.

Arnold Palmer, golfing legend and principal of Palmer Course Design, will keynote on Nov. 11 and Golf Course Designer Robert Trent Jones II will be the opening speaker on Nov. 12.

The Expo is free and will feature over 150 companies, highlighting displays and demonstrations spanning 66,000 square feet of exhibit space. Also located on the show floor will be the "Shop Talks" vendor-sponsored technical and demonstration sessions. The Palmer and Jones talks, in addition to the Expo and Shop Talks, are free to all Expo attendees.

Exhibitors include fertilizer, seed and sod, consultant services, golf cars, mowers, aerators, irrigation equipment, chemicals, architectural services, construction services,

software, equipment parts, landscape supplies, utility equipment, greens rollers and ball washers.

Palmer will keynote the conference on Nov. 11, opening the trade show and setting the stage for afternoon conference sessions in the areas of Agronomy, Management and Development. Each of three educational tracks is designed to shed light on issues unique to the public-access golf market. Superintendents who register and participate in the conference will receive .6 Continuing Education Units from the GCSAA. There is a registration fee to attend the Expo conference.

The Agronomy program will feature sessions on how to maintain golf courses under high-traffic conditions, staffing and crew motivational techniques and maintenance on a shoestring. As part of the Management program, Terry Buchen, CGCS and author of GCN's "Savvy Superintendent" column, will enlighten owners and managers on course-related matters with his discussion of "Agronomy for Non-Agronomists." The Developmental track, co-sponsored by *Golf Course News* and the National Golf Foundation, will feature several discussions of financing, course renovation and its relation to the bottom line, and environ-

(Continued on Page 24)

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MGCSA Championship

Wayzata Country Club • August 8, 1994

Many descriptions come to mind when you walk the fairways of a private country club. You imagine yourself taking off work one day and heading out to play 18 holes on a day when most everybody is on vacation or making other plans. When you arrive, there are 10 or 20 cars in the lot and you notice the greens are freshly cut and Bob has his crew rolling the greens. "Great day for golf," you say to yourself.

That's the feeling I got when I walked up to the driving range tee before the shotgun start at Wayzata C.C. What a great day for golf! Long Lake Ford and Minnesota Golf Cars were the host vendors for the MGCSA Superintendents Championship.

Susie Fobes was the guest speaker of the day and she presented slides of the wildflower test plots that were out on the course. Thanks to those people who took their time and energy to bring their products to show us!

Thanks also to host Superintendent Bob Distel and his fine crew for providing us with a gorgeous golf course! The food and service was excellent and the management most accomodating to us, and we thank you also!



Kevin Clunis, Stillwater, left, and Executive Director Scott Turtinen, center, with champion Scott Proshok, New Prague.

Scott Proshok, New Prague Golf Club, fired a smooth 77 at Wayzata Country Club on August 8 to win medalist honors at the MGCSA Championship. Scott rifled a 37 on the front, then took 40 to get around the back.

Runner-up honors went to Interlachen's John Katterheinrich who shot 38-41-79. Jeff Backstrom was third with an 80.

The Senior title went to Don Belkengren, Turf Supply Co., by shooting a net 76, not bad for a 22-handicapper. Larry Vetter was runner-up with a net 78, a little high for Larry but still good enough for second.

First flight winner was Doug Mahal, The Minikahda Club, who fired an 83 (net 71). Paul Jones, Tee Shot Marketing, also had a net 71 but lost in a scorecard playoff. Leroy Wurm, Albion Ridges Golf Club, also shot a net 71 to capture the second flight. The Calloway flight was won by Turf Supply Company's Bob Merchant with an adjusted 77.

Championship Flight

Scott Proshok	77
John Katterheinrich	79
Jeff Backstrom	80
Jerry Webb	81
Tom McCann	81
Steve Busch	81
Jim Johnson	81
Mike Brower	83
Paul Diegnau	84
Charles Miller	84
John Nylund	85
Steve Makowske	85
Cary Femrite	86
Scott Austin	86
Joe Buege	86
Kevin Clunis	87
Dan O'Brien	87
Rick Traver	87
Mark Sundeen	88
Mike Hilliard	88
Jeff Larson	88
Tom Meier	89
Jim Kimberly	89
Tom Wodash	89
Mike Klatte	90
Martin Terveer	90
Chuck Egeberg	90
Mike Nelson	91
Dale Parske	92
Lance Paulson	94
Tim George	95
Fred Ehlers	102
Dennis Owen	111
Brooks Ellingson	nc
James Gardner	nc
Rod Johnson	nc
Bruce Leland	nc
Pete Mogren	nc
Chuck Montague	nc
Norma O'Leary	nc
John Varty	nc

Callaway Flight (net scores)

Bob Merchant	77
Mike Kelly	78
Mike Lund	79
Jeff Johnson	83
Dan Evavold	84
Eric Petterson	86

Senior Flight (net scores)

Don Belkengren	76
Larry Vetter	78
Russ Adams	82
Jerry Bibbey	82
John Monson	93
Cyril Flem	97

First Flight (net scores)

Doug Mahal	71
Paul Jones	71
Troy Elam	72
Bob Adams	72
Rick Carr	72
Dan Augdahl	73
Tom Little	74
Charlie Pooch	75
Mike Kunshiur	75
John Raskob	76
Dave Krupp	76
Tim Berggren	76
John Betchwars	76
Tom Kientzle	77
Steve Young	78
Phil Gleasen	78
Rick Grannes	78
John Granholt	79
Mike Albus	79
Pat Morstad	79
Nate Gould	80
Bill Feriancek	82
Mike Olson	82
John Puljo	82
Scott Weltzin	82
George Peterson	83
Jim Kasser	83
Butch Greeninger	84
Bob Fredericks	84
Brian Evanson	84
Don Egeberg	84
Bob Distel	85
Todd Plaisted	85
Kevin Benson	85
Bill Gullicks	87
John Queensland	87
Mark Storby	87
Keith Tuorila	88
Monty Montague	89
Scott Knutson	89
Tom Feriancek	89
Steve Giesen	90
Jon Almquist	90
Bob Atol	98
Eric Nettz	98

Second Flight (net scores)

Leroy Wurm	71
Joe Check	71
John Harris	76
Bob Li ttle	78
Jim Kaufman	79
Bob Reihe	79
Troy Carson	84
Larry Thornton	88
Bob Frank	88





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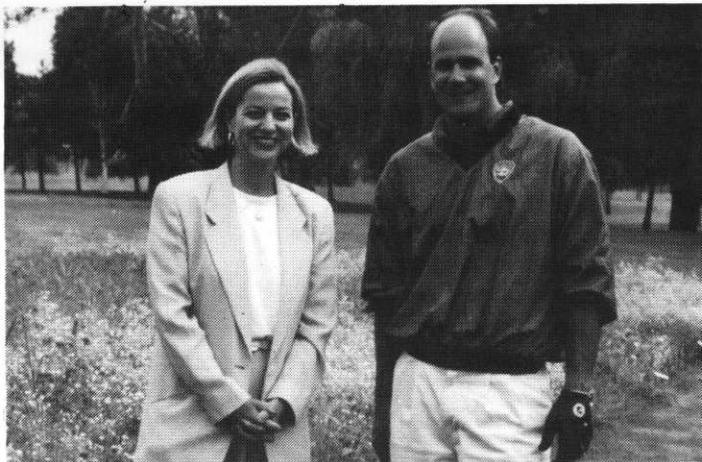
"ON THE CUTTING EDGE !"

Plaisted Companies Named Supplier For Best Sand

Best Sand Corporation, Chardon, Ohio, has named Plaisted Companies, Inc., of Elk River, as a new distributor of its golf course bunker sand. Plaisted will be distributing the white sand throughout Minnesota and western Wisconsin and delivering directly from a stockpile at the company's terminal.

Plaisted is a major supplier of bulk maintenance and construction materials such as greensmix, topdressing materials, cart path aggregates, coarse gravel and drain tile rock to the golf course market. The new sand is a welcome addition to the product line because it is the only white bunker material the company offers.

Best Sand offers its distributors and customers material that is consistent from one shipment to the next because it is all mined from the same company-owned quarries in Ohio. The sand is then shipped to terminals near Minneapolis, Cincinnati, Louisville, St. Louis, Detroit, Chicago and Hamilton, Ontario for distribution. Best Sand is a subsidiary of Fairmount Minerals, Chardon, the third largest producer of industrial silica sand in the United States and the largest U.S.-owned producer.



Susie Fobes, Environmental Recreation and Championship host superintendent Bob Distel look over the Wildflowers.

Golf Course Expo —

(Continued from Page 21)

mental regulation and its relation to sound public-access development.

Show hours are Friday, November 11 and Saturday, November 12 from 10:00 a.m.—5:00 p.m. at the Orange County Convention Center on International Drive in Orlando, Fla. For more information contact: *Golf Course News*, Conference Group, P.O. Box 997, 38 Lafayette St., Yarmouth, ME 04096; the Golf Course Expo hotline at 207-846-0600, ext. 248; or fax 207-846-0657.

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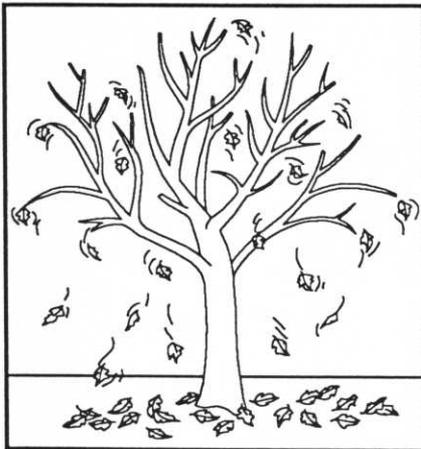
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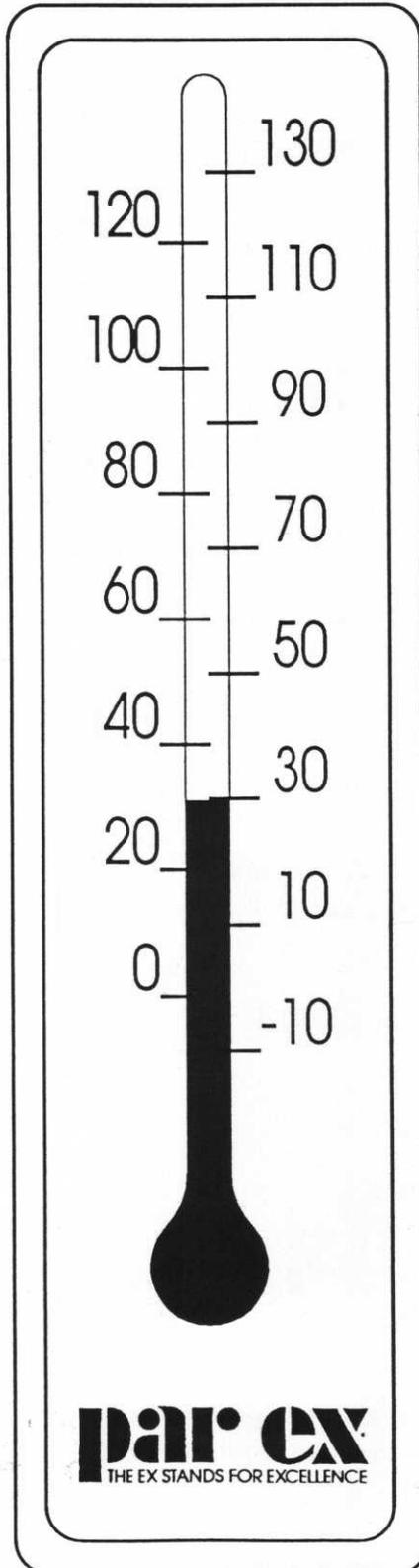
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Toro Partners with GCSAA For Golf Championship

The Golf Course Superintendents Association of American (GCSAA) has announced that The Toro Company has signed a long-term agreement to be the exclusive partner for the annual GCSAA Golf Championship, according to GCSAA President Joseph G. Baidy, CGCS.

"GCSAA is very excited about this new partnership with Toro," Baidy said. "Toro's outstanding commitment to the industry and our association is very much appreciated by the GCSAA membership."

John Szafranski, vice president and general manager of The Toro Company's commercial products division, said "We are elated about this opportunity to partner with GCSAA and share in this extraordinary experience. We are committed to the golf course management industry and are pleased to show our support by co-hosting a first-class golf championship with GCSAA."

Toro's commitment will be realized through many new enhancements to the GCSAA members-only tournament. Toro's support will enable GCSAA to offer more value to participants. Complimentary receptions, continental breakfasts, Victory Banquet, new and different tee prizes, plus a hole-in-one contest are just a few added features.

In addition, remaining funds donated by Toro which are not applied to the expense of hosting the event will be given

as a contribution to GCSAA's Scholarship & Research Foundation.

The 1995 GCSAA Golf Championship is scheduled for Feb. 20-21 in Monterey, Calif. Five courses in the Monterey Peninsula will host the tournament: The Bayonet at Fort Ord Golf Course, The Golf Club at Quail Lodge, Old Del Monte Golf Course, Poppy Hills Golf Course and Rancho Canada Golf Club - West Course.

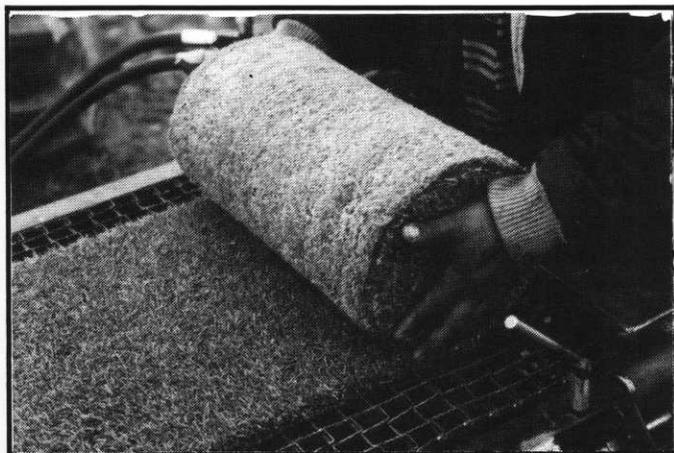
The 1995 championship will be the 45th in the association's history. The tournament will precede GCSAA's 66th International Golf Course Conference and Show scheduled for Feb. 20-27 in San Francisco.

The Toro Company is a leading provider of outdoor turf maintenance and beautification products for home, recreation and commercial applications.

Since 1926, GCSAA has been the leading professional association for the men and women who manage and maintain golf facilities in the United States and worldwide. From its headquarters in Lawrence, Kans., the association provides education, information and representation to more than 13,700 individual members from more than 50 countries. GCSAA's mission is to serve its members, advance their profession and enrich the quality of golf and its environment.

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Snow Mold Research Report

1993-1994 Winter Season

Treatments were applied at three locations: Nursery green at Duluth - 22 October, Fairway at Edinburgh USA - 2 November, Green not in play at Stillwater - 3 November and a Nursery green at Northfield - 3 November. Additional treatments were applied 17 November at two Metro locations. Products were measured, mixed and applied at 45PSI to four replicates at each site in 2 gal./1,000 sq. ft. The 4 by 10 foot plus were scored for percent disease (mycelium and sclerotia) and a 2nd record was made to record the level of live or dead turf about 3 weeks after the first notes were taken. This began 8 March and continued through 7 May.

Disease level was high at Duluth, 99% mycelium and 90% dead turf in the UTC (untreated controls), while Edinburgh had 6%, Stillwater had 3.3% and Northfield had no disease. The first three sites were observed a 2nd time and with so little disease meaningful observations were not possible; however, the plots that had disease levels at or near the UTC level were those plots that performed poorly at Duluth also. The usual phytotoxic symptoms associated with mercury and PCNB were present in the sites with no or little disease. This tip burn/mercury symptom is leaf tip injury and is removed in the first or 2nd mowing. The pale green grass color/PCNB symptom does not last long and, with renewed growth, color returns, a bright green normal grass color. Neither of these symptoms are much of a negative and may be seen only if you have side by side plots.

Several products have acceptable levels of disease control and this is now the 2nd year for such performance. The standard mix of Caloclor + Chloroneb + PCNB (1 oz + 2 oz + 2 oz) had 0.5% disease and a range of performance of +/-0.5, a high level of control and little variation in the

4 replicates. Other good performers are: Prostar + PCNB (4.3 oz + 4 oz), or Chipco 26019 + Daconil 2787 F (4 fl oz + 8 fl oz) and (2 fl oz + 8 fl oz) or Chipco 26019 + PCNB + Daconil 2787 F (4 fl oz + 4 oz + 8 fl oz) or at (2 fl oz + 4 oz + 4 fl oz), or Vorlan + PCNB + Daconil 2787 F (2 oz + 4 oz + 4 fl oz), or the new product from Zeneca ICIA5504 in combination with either Daconil 2787 F or PCNB (0.7 oz Plus either 8 fl oz or 8 oz), and combinations of PCNB and Daconil 2787 F or Daconil 2787 75W or Daconil 2787 WDG (2 oz + either 8.6 fl oz or 6 oz 75W or 6 oz WDG).

Products with low disease score and a small range are judged to be best. The small +/- following the Average Disease Score indicates the lack of or presence or mycelium and the superscript "s" indicates sclerotia of *Typhula ishikariensis* were present. The development of mycelium indicates some disease activity occurred, while the formation of sclerotia indicates a greater level of disease development. Color and grass growth scores three weeks after the initial readings indicate a strong relationship between disease/mycelium and dead turf. The UTC had 99% disease and 90% dead turf and the standard three way treatment of Caloclor + Chloroneb + PCNB had 0.5% disease and 0.5% dead turf.

The results of '93-'94 confirm the results from '92-'93. The winter disease agent this season was nearly all *Typhula ishikariensis* and little *Microdochium nivale* (*Fusarium nivale* or *Gerlachia nivalis*) was present. This species of *Typhula* is the more difficult one to control and is the most common *Typhula* in Minnesota. *T. incarnata* is also present some years, but is easier to control. Lower levels of disease control in the '92-'93 season are attributed to more Pink Patch or Pink Snow Mold. PCNB offers some control on both *Typhula*

and *Microdochium* and therefore can improve both the control of Grey by Daconil 2787 and Pink by Chipco 26019 or Vorlan. The use of Daconil alone allows for development of Pink and the use of Chipco or Vorlan alone allows for the development of Grey, while a low rate (2 to 4 oz) of PCNB alone is not adequate.

The results of the last two years indicate that we have several choices for winter disease management. Some may be tempted to do nothing and hope for a winter season with no damage. I don't recommend that. Others who have open winters and little long term snow cover may wish to direct products towards the Pink group and those with more snow cover should consider the Grey types. A large area of Minnesota will have the potential for both and I cannot predict which species will be the most common. Early spring/late winter loss of turf can be due to *Microdochium* species, an early application of Chipco 26019, Vorlan, Fungo 50 or Tersan 1991 may be important to those who have good winter survival, but then experience rapid turf loss.

Chipco 26019 or Vorlan with Daconil 2787 F is a good choice in much of Minnesota and the addition of PCNB to this program strengthens both side of the treatment target. The Metro area should have good results with this recommendation; as you move north in the state the addition of PCNB is more important. Prostar or ICIA 5504 (when registered) in combination with either Daconil 2787 or PCNB is another good choice. Daconil in '93-'94 was a better choice than PCNB due to the fact the most disease pressure was from *Typhula* species. Products like Banner, Bayleton, Rubigan and now Sentinel are not good choices for most of Minnesota due to the fact that *Typhula ishikariensis* is not controlled.

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Snow Mold —

(Continued from Page 27)

Table 1. Snow Mold 1993-94 Minnesota

Snow Mold Treatment	Rate/1,000 sq. ft.	Average Disease Score	Range ±
SN 84364 NA314 Prostar	4.3 oz.	95-	5.0
SN 84364 NA314 Prostar & PCNB	4.3 oz. 4.0 oz.	0-	0.5
SN 84364 NA313 Prostar plus Triadimefon	3.6 oz.	54+	33.
Chipco 26019 F & Daconil 2787 F	4.0 fl. 8.0 fl.	2-	1.0
Chipco 26019 F & PCNB	4.0 fl. 6.0 oz.	13-	12.
Chipco 26019 F & PCNB	2.0 fl 4.0 oz.	32+	14.
Chipco 26019 & PCNB & Daconil 2787 F	4.0 fl. 4.0 oz. 8.0 fl.	0-	0
Chipco 26019 & PCNB & Daconil 2787 F	2.0 fl. 4.0 oz. 4.0 fl.	0-	0
Vorlan & Daconil 2787 & PCNB	2.0 oz. 4.0 fl. 4.0 oz.	2-	2
Calcolar & Tersan SP & PCNB	1.0 oz. 2.0 oz. 2.0 oz.	0.5-	0.5
ICIA 5504	0.7 oz.	79-	15
ICIA 5504 & PCNB	0.7 oz.	2-	1
ICIA 5504 & Daconil	0.7 oz. 8.0 fl.	0-	0
ICIA 5504 & Daconil F & PCNB	0.7 oz. 8.0 fl. 8.0 oz.	0-	0
Chipco 26019 F & Daconil 2787 F	2.0 fl. 8.0 fl.	0-	1
PCNB	2.0 oz.	80+	10
PCNB & Tersan SP &	2.0 oz. 2.0 oz.	55-	15
PCNB & Daconil 2787 F	2.0 oz. 8.6 fl.	1-	1
PCNB & Daconil 2787 75W	2.0 oz. 6.0 oz.	3-	3
PCNB & Daconil 2787WDG	6.0 oz. 6.0 oz.	3-	2.0
UTC		99+	5

Winter Injury Report '93 - '94

Situation

Winter injury, a serious problem for golf courses, has become even worse for those who have prevented one form of injury-desiccation only to have another problem related to crown hydration become the reason for turf loss. The high expectation for excellent turf quality in the early spring has stimulated the use of covers and the expense-labor and cost has driven the expectations even higher for quality turf.

Objectives

The study was to evaluate the ability of two grass populations, Poa and Bent, to survive freeze/thaw cycles after being removed from covers. Turf survival and green up data were collected to measure differences.

Procedure

Turf plugs were taken last fall from the University of Minnesota Golf Course from a site having Poa and another having Bent. These plugs were placed in metal flats as individual cores, surrounded with sand and then covered with green covers. Samples were taken three times during the winter and the cores were then saturated with water before freezing or left at normal soil water levels and stored in a growth chamber programmed to freeze the soil cores to minus 4 C or 25 degrees F. The cores were removed after one to 5 freeze cycles and placed in the green house for color and growth evaluations.

Results

The first plugs removed and grown out in the greenhouse were nearly identical in response: A 100% survival and 100% regrowth for both Poa and Bent. This was a real change from last year and the pattern continued. All 5 grow outs and all 3 replicates performed the same. Early in the process we identified that all plugs were nearly 100% Bent and no Poa was present. At first we believed it was a mix-up in plug labeling, but this was not the case. All plugs were mostly Bent and the source site was checked in the spring confirming the high Bent level. The only information gathered is that Bent grass survived all treatments. Covers made no difference to Bent grass. At least 90 to 95% survival of Bent was recorded in all plugs taken in 1993 and tested in 1994. The level of Bent in the test plugs prevented any meaningful measurements.

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Spray Drift Management —

(Continued from Page 15)

Strategies to Reduce Drift

Conscientious, experienced operators rarely get into serious trouble with drift damage because they take steps to avoid it. Here are 10 management strategies to reduce drift:

1. Use nozzles that produce coarser droplets when applying pesticides on targets that do not require small, uniformly distributed droplets (e.g., systemic herbicides).
2. Keep the boom closer to the spray target.
3. Keep spray volume up, and use nozzles with larger orifices.
4. Keep spray pressure up, and make sure pressure gauges are accurate.
5. Use spray additives and thickeners if necessary.
6. Follow label recommendations to avoid drift with highly volatile pesticides.
7. Avoid spraying on extremely hot and dry days, especially if sensitive vegetation is nearby.
8. Do not spray when conditions are favorable for an atmospheric inversion.
9. Do not spray when wind speeds are higher than 5 miles per hour.
10. Avoid spraying near sensitive crops that are downwind. Leave a buffer strip of 50 to 100 feet, and spray the strip later when the wind shifts.

Reducing spray drift not only improves application efficiency, but also reduces the risk to safety and health-related problems caused by drift.

Because it is impossible to eliminate drift altogether, always wear protective clothing when applying pesticides. A respirator is a must, especially if your tractor does not have a cab.

If you have any doubts about a spraying job that might result in drift, wait until you no longer have that element of doubt. Your goal should be to eliminate off-target movement of pesticides, no matter how small it may be.

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