#### Table 1b. Summer Annual Broadleaf Weeds



Pigweed - Amaranthus blitoides (May have reddish stem and taproot)



Purslane - Portulaca oleracea (Fleshy leaves)



Spurge - Euphorbia supina (Milky sap distinguishes from knotweed)



Oxalis (Yellow Woodsorrel) - Oxalis stricta (Heart-shaped leaves)





Pineappleweed – Matricaria matricarioides

### Table 1c. Perennial Broadleaf Weeds

Figure includes recommended timing of herbicide application for best control.



### Table 1d. Perennial Broadleaf Weeds

Figure includes recommended timing of herbicide application for best control.



#### Table 2. Recommended Herbicides for Broadleaf Weed Control

#### Preemergence

#### Postemergence

#### Wee

Weed Species	Bensulide	Ethofumesate	Benefin	Pendimethalin	Prodiamine	Dithiopyr	Siduron	Oxadiazon	Isoxaben	2,4-D	2,4-DP	MCPA	MCPP	Dicamba	Clopyralid	Fluroxypyr	Triclopyr	Quinclorac	Carfentrazone	Sulfentrazone
Summer Annual Broadleaf Weeds																				
Black Medic						$\checkmark$							$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$		
Carpetweed					<	$\checkmark$				$\checkmark$			$\checkmark$	$\checkmark$						
Common Mallow													$\checkmark$	$\checkmark$	$\checkmark$					
Corn Speedwell			$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$							$\checkmark$				$ \longrightarrow $	
Knotweed				$\checkmark$	$\checkmark$	$\checkmark$			✓				$\checkmark$	$\checkmark$					$ \longrightarrow $	
Lambsquarters	<ul> <li>✓</li> </ul>			1	<ul> <li>✓</li> </ul>	1			✓											
Oxalis (Yellow Woodsorrel)	<u> </u>			<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<b>√</b>		✓	<u>√</u>	a	а				b		b		$ \rightarrow $	
Pigweed					<ul> <li>✓</li> </ul>	✓ ✓		<ul> <li>✓</li> </ul>	✓	<ul> <li>✓</li> </ul>			<ul> <li>✓</li> </ul>							
Pineappleweed				<b>√</b>		✓ 		<b>√</b>	$\checkmark$		$\checkmark$		$\checkmark$		<ul> <li>✓</li> </ul>				$ \rightarrow $	
Prostrate Spurge Purslane		$\checkmark$		✓ ✓	✓ √	<ul> <li>✓</li> </ul>		V ./	✓ ✓	<ul> <li>✓</li> </ul>	~		~	$\checkmark$						
		v		v	v	v		v	•				_	•			_		$\rightarrow$	
Virginia Pepperweed Winter Annual Broadleaf Weeds																				
Common Chickweed		$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$			✓				$\checkmark$	$\checkmark$						
Common Groundsel																				
Henbit	<b>~</b>		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$					$\checkmark$			$\checkmark$			
Prickly Lettuce																				
Shepard's Purse	$\checkmark$				$\checkmark$	$\checkmark$			$\checkmark$											
Sowthistle (Annual)																				
Biennial and Perennial Broadleaf Weeds																				
Birdsfoot trefoil																				
Blackseed Plantain										$\checkmark$			$\checkmark$		$\checkmark$					
Buckhorn Plantain										$\checkmark$			$\checkmark$		$\checkmark$					
Bull Thistle														$\checkmark$	$\checkmark$					
Canada Thistle										$\checkmark$				$\checkmark$	$\checkmark$					
Chicory										1									$ \longrightarrow $	
Creeping Speedwell (Veronica)										✓			<ul> <li>✓</li> </ul>							
Curly Dock										✓				✓	✓					
Dandelion Field Bindward										~		✓		✓			~	✓ ✓	✓	
Field Bindweed														✓			$\checkmark$	<b>v</b>		
Ground Ivy (Creeping Charlie) Indian Mock Strawberry													_	•			v		$\rightarrow$	
Mouse-ear Chickweed	-												$\checkmark$	$\checkmark$	$\checkmark$		_		$\rightarrow$	
Red Clover	-																		$\rightarrow$	-
White Clover													$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$		
Wild Carrot																				
Wild Violet														$\checkmark$	$\checkmark$		$\checkmark$			
Yarrow														✓						
												_			_		_	_		

Where the recommendation is denoted by a letter, the combination of herbicides with the same letter is recommended.

Best Choice age Effective

Table 3. Broadleaf Herbicides and	d C	on	nbi	nat	ion	۱Pı	rod	uc	ts			
						_		_		e	e	
						σ	Fluroxypyr	မ္က		IZON	Sulfentrazone	E
		0	_	•	ba	rali	¢ур	lor	pyr	ntra	ntra	Pyrfaflufen
Products	2,4-D	-D	CP/	E E	can	opy	î	ling	iclo	arfe	Ifer	rfai
FIGUEIS	2,4	2,4	M	ĕ	Ō	õ	ЦЦ	ğ	Ē	ပိ	Su	٦ ک
Formula 40, Dymec, Weedone LV4, Weedar 64, LESCO A-4D,												
Weeddestroy AM-40, Opti-Amine, Harball, Barrage HF MCPP 4-Amine, Lescopex, Turfgro MCPP 4K, Mecomec 2.5,									-			
Mecomec 4												
2 Plus 2												
Banvel, Diablo, Vanquish												
Four-Power Plus, Super D Weedone												
Trimec Classic, Trimec 899, Trimec 992, Trimec LAF-637, Strike 3,												
Three Way Selective, Trimec Bent, Bent Selective, Triplet, 3-D,												
Trexsan, Mec-Amine-D, Mec Amine-BG, Trimec 1000												
MCPA 4-Amine												
Tri-Power, Trimec Encore				_								
Weedone DPC, Turf D-DP												
Trimec Turf Ester, Super Trimec, Brushmaster												
Three Way Ester, Tri-ester, Tri-amine, Dissolve, Spoiler Tri-ester II, Tri-amine II												
				_				_	_			
Turflon												
Chaser, Chaser 2, Turflon II amine												
Cool Power, Horsepower Lontrel												
Chaser Ultra												
Confront, 2-D												
Momentum								_				
Battleship												
Millenium Ultra 2, Millenium Ultra Plus												
Spotlight												
Chaser Ultra 2												
Battleship III												
Momentum FX, Momentum FX2												
Escalade, Escalade 2, Escalade Low Odor												
Strike Three Ultra 2												
Drive												
Onetime												
Quincept									_			
Quicksilver												
Shutout												
SquareOne												
Speedzone												
Powerzone												
Dismiss												
Surge Q4												
Octane												
Solitare												
4 Speed												
4 Speed XT												
T-Zone												

# **On Board** Q&A with Members of the Board of Directors

Spring, a fresh start. What goals have you set for yourself in the season ahead?



#### Bill Gullicks, Superintendent at Bellwood Oaks Golf Course Better Environmental Awareness

There are so many different things going on in our industry with environmental awareness, I thought I should take an in depth look at what I'm already doing. We are all stewards of the environment, but am I really doing everything to lessen my footprint in "Mother Nature"? During the next year I plan to play my own devils advocate when it comes to my turf management practices. Do I really need to water everything tonight or could I get by with selected areas? Am I spraying a fungicide to feel secure or could another cultural practice give me the same result? Is there anything not currently being done to make the natural areas more nature friendly? Do I really need to be doing something or am I doing it because I always have? Why? Really? Because? These are a few of the words I'm going to be asking myself this year. By questioning my practices I hope to learn more about my golf course and more about myself as a superintendent.



#### **Roger Stewart CGCS, Superintendent at TPC Twin Cities**

One of the goals I have for 2013 is to keep the momentum going on the MGCSA Research Committee. Now that we have identified the member driven research projects for 2013 we need to develop topics for 2014 and beyond. We have an energetic and engaged committee and my goal is to make sure we remain focused and on track as well as engaged in exploring new projects and fund raising ideas.

The Scramble , June 3rd 2013...Medina Golf and Country Club...you, your club pro, your GM and club president? Or will it be a team of your staff? Your Dad, Brother and 'special in-law? Regardless...it won't be the same without you!



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#### **Kerry Glader, Sales Manager Plaisted Companies**

As I ponder on this question, I can't help but think about the profession that has gotten me to where I am today. The year 2012 was my 18th year in sales following 18 years as a golf course superintendent. As the current sales manager for Plaisted Companies, I have been extremely lucky to meet and come to know so many great people. They include golf course superintendents, assistants, equipment managers, me-

chanics, crew members, architects and the list goes on.

After starting in the business in 1970 pushing a Jacobsen rotary mower at the Cloquet Country Club, I have always had the drive to be better and improve myself and others by example. From the smell of freshly cut grass in the morning to checking the sprinklers running at night, the goal was always to keep and grow healthy turf. After a personal epiphany taught to me by my growing young sons, I moved into the sales side of the Turf Industry. My original goal became #2

GRO

# **On Board** (Continued) Q&A with Members of the Board of Directors

Spring, a fresh start. What goals have you set for yourself in the season ahead?

replaced by my new #1 most important goal "Don't forget your family"! It is the easiest to overlook and be forgotten because we are so dedicated to our profession that our families suffer. I missed so many activities when my children were growing up and I urge you to take the time to enjoy them when they are young because they grow up too fast! It is possible to be successful with both!

My goal for 2013 is to continue to serve this great profession and lead by example. Family first and enlightenment of the "newbies" and "seasoned veterans" to not forget the basics of turf grass management. You have so many advanced tools in your tool boxes that I think the basics get overlooked. Back in the dark ages we spiked to allow better water movement, verti-cut to reduce thatch build-up, aerated twice a year for improved air movement, used soluble fertilizers from May to September to control feeding, applied root growth enhancers and wetting agents to help the root systems thrive and of course last but not least, we top-dressed on a weekly or bi-weekly basis. Don't forget that you are growing next year's grass today! Everything you do today is to help your turf survive into next year.

So my professional goal is what it always has been. Be helpful, be thoughtful, be a friend first, oh and then remember to sell, but also always give free advice! Is it age that makes us wiser or the experiences in both family and work that define who we are? I am defined by family, faith, friends, and of course my better half and wife of 37 years, Barb! I would imagine it is your better half too, that helps to guide, support and lift you up to reach your goals.

Barb now says, "Kerry is maturing rather well and now plays in the sand box at work"! So now I get to play with my two new Grandsons in the sand box and watch them grow up! Life is good!! Don't miss out on it!

Affiliates Mark Your Calendars!!! Affiliate Appreciation Day May 13th at Castlewood Golf Club



*Who is in your Network?* Recently the Southern Superintendents got together to discuss current Association issues with Jack MacKenzie, ED of the MGCSA, at The Jewel in Lake City. The event, one of several planned by Tom Prosheck, was hosted by Doug Mahal, CGCS.



#### Fast, Efficient Fairway Aeration

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#### **Benefits of Membership in the MGCSA**

**MGCSA.org:** The MGCSA provides its membership an electronic destination. The site offers a broad range of services including latest news, meeting information, important links, local association contacts and meeting schedules, as well as a market place for used equipment or student internships. Links are provided to the Affiliate Members who advertise on the web site.

**Education:** The MGCSA provides a range of high quality discounted professional education with more than 100 hours of relevant classes at the Northern Green Expo in January each year, supplemented by an extensive program at the Mega Seminar, as well as the annual MGA Spring Turf Forum.

**Research:** The MGCSA coordinates with researchers at the University of Minnesota's TROE Center to make sure you get the information you need. The association also directs Turfgrass Research Benefit Week, the annual sale of donated tee-times, to raise money for golf turfgrass research. And the association also contributes to The Turf Endowment fund to ensure a continuing program at the University of Minnesota.

**Government Relations:** The MGCSA provides access to the State Capitol through a continued relationship with the Minnesota Golf Association and other Green Industry Allies. This service keeps your association aware of issues likely to affect golf as they emerge rather than after the fact. This proactive presence also helps us educate legislators and regulators by providing solid information and research findings as they strive to make sound decisions for the good of the whole community. The MGCSA has representation at the Minnesota Nursery and Landscape's 'Day on the Hill' event. Hole Notes Magazine: The MGCSA provides an award winning professional golf course superintendent association journal. Published ten times each year in a digital format, Hole Notes strives to provide relevant, interesting information that reflects the personality and professionalism of the membership. Links are provided to the Affiliate members who advertise in the magazine.

**Membership Directory:** At the Member's Only section the MGCSA provides an annually updated listing of names and contact details for every member of the association. This electronic directory puts each within fingertip reach of around 700 allied professionals across the region.

**Employment Referral Service:** The MGCSA provides a link between the people with jobs and those who want them. The employment referral service is available on-line at MGCSA.org as well as electronically delivered weekly through 'e-updates'.

**Email Alerts:** The MGCSA uses the internet to provide updates and alerts on urgent matters as they arise so we remain current with issues that may effect you, the industry and the Association.

**Scholarships:** The MGCSA extends its support to the next generation through an annual scholarship program to assist children and grandchildren of superintendents who have achieved academic excellence.

**Wee One Support:** The MGCSA annually hosts a Wee One fund raising golf outing with the proceeds going to support this outstanding program that serves those in the goof course turf management industry.