What to Expect at the “Almost” Spring Meeting

After attending an educational program that will benefit your facility, you will want to enjoy the indoor and outdoor oversized Olympic swimming pools and mineral soaking pools fed by a virtually unlimited supply of 155-degree natural hot spring water (cooled to various temperatures for comfort and maximum enjoyment)! Join us March 2 & 3, 2020 at Fairmont Hot Springs, Anaconda, Mont.

We have a pair of two highly regarded professors – and business partners. William “Bill” Kreuser, PhD is an assistant professor in the Department of Agronomy and Horticulture at the University of Nebraska-Lincoln. Doug Soldat, Ph.D, is an associate professor and turfgrass extension specialist in the Department of Soil Science at the University of Wisconsin-Madison.

Together they offer a web-based application designed to be a decision support tool, available as a subscription. Each of these speakers are highly regarded by our own members from their past participation in the Big Sky Country.

At the “Almost” Spring Meeting we also want to help the courses in attendance to set up their own facility BMPs – while onsite. Mark Johnson, GCSAA Assoc. Director, Environmental Programs will be on hand to assist.

Rounds4Research Auction

April 27 - May 3, 2020

We need your donated rounds! It is never too early to get rolling. To complete the online donation form, please visit http://www.eifg.org/research/rounds-4-research/donate-a-round/online-form.

We have two superintendent/assistant teams out there to help you! Any questions or concerns, or for a little help on how to get started, please contact Ryan Blechta, 406-539-4405, Spanish Peaks, or Jason Busch, 307-752-3579, The Powder Horn.

The Rounds 4 Research program was designed to address a critical shortage in turfgrass.

Chapters of the Northwest Hospitality Room

Our 2020 Chapters of the Northwest Hospitality Room will be offered in a unique location! Enjoy the evening with your turf industry peers at our private event at the Tin Roof of Orlando, Wednesday, 6:30 - 9:30, January 29, 2020. This eclectic space offers indoor and outdoor options. Complimentary food and beverages will be offered thanks to the generosity of our allied partners. Contact Lori to help sponsor the event.

PPGCSA Events:

PPGCSA Private Webcast - January TBA

Chapters of the Northwest Hospitality Room January 29, 2020, Tin Roof of Orlando, 2020 GIS

PPGCSA “Almost” Spring Meeting & Trade Show

October 13-14, 2020, Billings Hotel & Convention Center, Billings, MT

For more events, visit ppgcsa.org

Members Approve PPGCSA EM Classification

While equipment managers were always welcome to be part of the Peaks & Prairies GCSA, the membership approved an official EM classification at the Fall Meeting. The EM/Technician classification has been added to the online membership application options. We look forward to having more EMs participate at our events!
“Peaks & Prairies Golf Course Superintendents Association is dedicated to furthering the education of our members for the betterment of golf and its environment.”

Inside this issue

President’s Message page 3
Past President’s Message page 4
A Great Career - Stribley page 7
Ready for Another Winter page 10
Fall Meeting page 16
Montana Scholarship Tournament page 19
Valley of Construction page 20
New Members page 22

Advertisers index

Johnson Distributing page 6
Midland Implement page 3, 6, 24
Wilbur-Ellis/The Andersons page 5
Simplot Partners page 7
Rain Bird page 8
John Deere page 9 & 13
Planet Turf page 12
Tom Roe & Sons. page 10
GPS As-Builts page 10
Magic Valley Bentgrass Sod page 10
Growth Products page 11
Masek Golf Cars page 14
2M Company page 15
Floratine Northwest page 16
Desert Green Turf page 16
Amvac Environmental Products page 18
Compression Leasing Services page 18
Baer Design Services page 18
Steiner Thuesen PLLC page 22
Superior Tech Products page 23
Granite Peak Pump Service page 23

Peaks & Prairies Golf Course Superintendents Association

OFFICERS
President: Jason Lamb, Sidney Country Club, Sidney, Mont., 406/433-5423 (S) or 406/480-2986 (C) scgcc@midrivers.com
Vice President: Mike Kitchen, CGCS, Teton Pines Resort & Country Club, Jackson, Wyo., 307/732-4146 (S) mikek@tetonnipes.com
Secretary/Treasurer: Rick Hathaway, Rick Hathaway, Rock Creek Cattle Company, Deer Lodge, Mont. 406/846-1446 (S) or 406/560-8371 (C) rhathaway@rockcreekcattlecompany.com

BOARD OF DIRECTORS
Anthony Benes, Old Works Golf Course, Anaconda, Mont., cell: 970-389-2857, abenes@troon.com
Tom Bengston, Glacier View Golf Club, West Glacier, Mont., 406/888-5471 (S) or 406/314-5619 (C) t.s.bengtson@gmail.com
Ryan Blechta, Spanish Peaks Mountain Club, Big Sky, Mont., 406/539-4405 (C) rblechta@spanishpeaksmountainclub.com
Mike Combs, Buffalo Hill Golf Course, Kalispell, Mont. 360/949-0979 (C) golfsuper@me.com
Jeff Jensen, Jackson Hole Golf & Tennis Club, Jackson, Wyo., 307/733-7802 (S) or 208/881-2189 (C) jjensen@gtlc.com
Garrett Turner, The Reserve at Moonlight Basin, Big Sky, Mont. 406/209-5498 (C) gtuner@moonlightbasin.com
Past President: Danny Renz, Douglas Community Golf Course, Douglas, Wyo. 307/358-3492 (S) or 605/890-1113 (C) drenz31@yahoo.com

COMMITTEE CHAIRS
Education: Jason Lamb
Finance: Rick Hathaway
Government Affairs: Jeff Jensen
Membership Outreach: Garrett Turner
Nominating: Jason Busch
Rounds4Research: Jason Busch, Ryan Blechta
Scholarship: Jason Busch
Tourism: Danny Renz & Ryan Blechta
GCSAA Chapter Delegate: Jason Busch

Allied Member Liaison: Julien Pates (Midland Implement)
Assistant Superintendent Liaison: Gregory Dillard, Jackson Hole Golf & Tennis Club, Jackson, Wyo.

THE PERFECT LIE is published quarterly by Peaks & Prairies GCSA, and is edited by Lori Russell. Our newsletter is not copyrighted, but we would appreciate credit being given when original material is reprinted. Advertising and article deadlines are the 10th of February, April, July, and October.

PEAKS & PRAIRIES GCSA OFFICE
Lori Russell, Executive Director
P.O. Box 807, Lolo, MT 59847. ppgcds.org
Phone & Fax 406/273-0791  ppgcds@ppgcds.org
I’m back! Just when you thought it was safe to start reading the president’s article again, my incessant rambling is back. For anyone who missed my first go around, I am Jason Lamb, the superintendent and GM at Sidney Country Club.

My wife, Janelle, daughter Mercedes, son Tristan, and I moved back to Montana 11 years ago. We were in California for about nine years working on a course in Rocklin. Before that, I was born and raised in Montana. I have been working in the golf industry since 1994. I started working as a range kid then moved into the pro shop and finally found my home in the maintenance shop. I have been there ever since. I received a degree in Horticulture, Turfgrass science from Montana State University. I have now been in the turf industry for around 25 years.

The amazing thing to me is I still learn new things every day. Since this is my second article introducing myself, I will be very brief. That, and the fact that I am very late getting this to Lori. So, I will save you the pain of wading through my normal minutia and call it a day. If you are a true glutton for punishment you can go back and read my original article. It should be about fall of 2017. Until next time, it is a true pleasure for me to be your association’s president.

As a side note, I would like to thank Clark Throssell, PhD., who served as Peaks’ personal turfgrass scientist and extension agent for numerous years. Although he will no longer be on retainer by the association, he is still available to answer questions through his private company, Turfgrass R&D, Inc. He also assures me he will still be around at meetings. So, when you see him, be sure to thank him for his years of great service to the association.

Innovative Seeding, Top Dressing and Debris Management Products to meet your ever changing Turf Maintenance Practices.

www.midlandimplement.com • 402 DANIEL ST • BILLINGS, MT 59107 • PH (406) 248-7771 • FAX (406) 252-5772
I am sure the courses in our region are winterized and everyone is ready for what could be a long winter. Wow, what a sudden change in events. We hit -20 degrees with a -30 chill factor and it was still October. I remember back in 2014 (I believe), it went from 60 to 20 below zero in 36 hours - but that was in the middle of November, not October 29. Nothing like good ol’ Mother Nature continuing to keep us on our toes.

I’d like to start off by thanking everyone for allowing me to serve you all as the president of Peaks & Prairies most of the past year. I kind of got thrown to the wolves with Wade accepting a different job not long before our spring meeting. Mentally, I didn’t have much time to prepare. However, once I became involved and starting doing things, I realized it was fairly easy and I think it went pretty well. I genuinely enjoyed my time as president.

We have lost superintendents (many who have served on the board) to new fields or new jobs in areas with different chapters. The good part about this is that we have new blood. Some of the replacements are new members. If you know of anyone new in your area who has not joined,
BLACK IS THE NEW GREEN™

DiscoverHCU.com

COUNT ON WILBUR-ELLIS® AND THE ANDERSONS® FOR ALL YOUR TURF CARE NEEDS!

WILBUR-ELLIS SPECIALISTS

MIKE DOTY
Billings, MT
800.736.5359

ROB WAREHIME
Great Falls, MT
406.727.4500

BRENT RADFORD
Spokane, WA
509.994.4735

ANDERSONS TERRITORY MANAGER

ED PRICE: office 208.772.9290 | cell 509.981.9077

VISIT ANDERSONSPLANTNUTRIENT.COM FOR MORE PRODUCT INFORMATION
Past President continued from page 4

please encourage them to join our wonderful chapter. If you are a new member or you haven’t looked into running for the board or serving on a committee, I suggest you give it a thought. Having fresh ideas are important. On a committee, you can help decide speakers and topics for our events, help decide to whom the scholarship money is awarded, or help find locations for the scholarship/continuing education golf events. As a grassroots ambassador – or even an involved member - you can also speak with your local legislators on topics that are important to the superintendent profession and help get our foot in the door to make sure our voices are heard. You can be a chapter delegate and travel to meet with other chapter delegates to help guide the profession into the future. There are many ways to get involved and make a difference for this chapter. I think we have a chapter to be proud of and I hope to keep it that way. While I have never belonged to another chapter and I have little to compare it to, I’ve heard speakers, allied members and Dave Phipps tell us how much they like our involvement and how much we care about what we do and what we can do for each other.

Once again, I thank everyone, including allied members, for allowing me to serve you. I hope everyone has a safe and warm winter. It’s very possible it could be a long one, so get out and go skiing or snowboarding or hunting. Take a fun vacation in a warm place. Whatever you do, get your mind off it and enjoy yourself because you know the warm weather is coming back and there won’t be much time for fun and relaxation. See you all soon.

Danny Renz and Jason Lamb
There comes a time to hang up the cup cutter and call it a career. This is what Joe Stribley has decided after working in the golf industry for 39 years.

Joe has been around golf since a young age, in part because of his parent’s love for the game. In the 8th grade, he worked in the bag room at Hilands Golf Club. The summer of his senior year in high school, he worked on the grounds crew for Don Tolson. Joe went on to college and played competitive golf, but was not committed to school. Unsure of what to do for a career, he worked construction and traveled around New Zealand and Australia for the next five years.

Returning to Billings, Joe recalls playing Frisbee in the street and Don Tolson stopping to ask if he would be interested in working for him at Yellowstone Country Club. After working for a season at Yellowstone, Joe attended Michigan State University and received a turf management degree. Joe accepted the superintendent position at Par 3 in Billings after college, where he remained for eight years. Once the superintendent position opened at Yellowstone Country Club, he applied and got the position. Over the 30 years at Yellowstone, Joe has been involved with a lot of changes on the property.

I have had the opportunity of working for Joe the past 13 years, and it has been an honor and a pleasure. Joe is a great boss and a great person. He is always willing to help others and is always looking for ways to improve the property. I have learned a lot from Joe and have enjoyed working with him.

I hope Joe has a long and happy retirement. He deserves it after all his years of hard work and dedication to the golf industry. Joe will be missed, but I know he will continue to be involved in the golf industry in some way. I wish him all the best in his future endeavors.

Cody Schulke, Yellowstone Country Club, Billings, Mont.
years at Yellowstone Country Club. Joe has taught me a lot about being a leader. Recently I sat down with him to talk about his career in the industry.

What interested you in the career? Jokingly, he responded, “Beer was free on men’s day!”

What was one of the biggest challenges? Never figuring it out, never being 100% perfect everywhere on the golf course. Once you had something solved here, something would need attention there.

What are some of the improvements you’ve seen in the industry over the years? Metal spikes were huge! Fertilizers, wetting agents, growth regulators, rollers, and access to information via networking with people and the internet.

Have you seen any negatives in the industry? The cost involved in maintenance, hence the cost of playing the game. For example, what we do to sand bunkers for being a hazard.

In the time you’ve been at YCC, what is something of which you are proud? Lasting as an employee at a country club environment for so long.

Is there anything you will miss? (Laughing) Enjoyed preparing a golf course to peak for a tournament. You know it was good when the comments were how great the greens were.

If you could go back and change your career, would you? No, no regrets! Felt lucky to work outside and on this piece of property. Also thankful for how we are now viewed in the profession; we are no longer the guy in overalls down at the barn.

What are you looking forward to once you are retired? Every day will be Saturday! Looking forward to spending time with my wife, kids and grandkids. Also, looking forward to traveling, fishing and exploring.

Congratulations, Joe, on a great career and being such a great leader in the industry. You will never have to use the term “one day closer to winter” when things aren’t going right on the golf course.

A few memories I personally will miss seeing… the one finger pecking away on the keyboard, the classic flip phone, and your ability to keep your cool whenever something wasn’t going right.

GIS 2017 with G11 (Top)
Spring Meeting 2005 with Haas (Bottom)
Performance. Reliability. Value. These machines can really cut it.

C & B Operations
5121 Midland Rd
Billings, MT 59101
(800) 823-9242

Stotz Equipment
52 Blackmore Rd, Evansville, WY
10801 Hwy 789 Riverton, WY
(800) 359-0250
Hopefully, the last of the fall turfgrass management tasks have been completed by the time you read this article. Snow mold fungicide applications have been made, the mowers are stored for a few months and the irrigation system has been blown out. Perhaps a few golfers are playing on the warm days. All is in good order. But have you considered what the turfgrass is doing at this time?

Winter Acclimation of Turfgrass

As temperatures gradually get cooler throughout fall, and day lengths get shorter, turfgrass plants go through an acclimation process so they can survive cold temperatures of winter. All the action occurs in the crown, or growing point, of a turfgrass plant. Keep in mind all new growth, whether leaves, roots, tillers, rhizomes or stolons, initiates in the crown. If the crown of the plant survives, then the plant can begin growing when favorable temperatures return.

The big picture is that plants want to actively reduce the water content of its cells and lower the freezing point of water remaining in the cells. According to research by Kreuser (2019) at the University of Nebraska-Lincoln, crown moisture content is approximately 80 to 85% in mid-fall and about 55 to 60% during winter. This decrease in crown moisture helps the turfgrass plants survive cold temperatures.

Superintendents can encourage the acclimation process in fall by gradually tapering off their management inputs as fall progresses. For instance, do not force the turfgrass to continue growing past early October by fertilizing with high rates of nitrogen and forcing growth. Fertilizing with low rates of nitrogen as long as the grass is green and growing is fine. Mow at a slightly higher height in fall to allow the plant to produce more carbohydrates that can be stored and used during winter. And continue to water to provide sufficient soil moisture so the turf
THE FOUNDATION OF YOUR GREENS PROGRAM

Essential Plus 1-0-1

- Stimulates Fertilizer & Nutrient Uptake
- Contains a Natural Sticker/Spreader
- Improves Nutrient Release & Water HoldingCapacity
- Improves Cation Exchange Capacity in Soil
- A Food Source for Beneficial Soil Microbes
- Improves Root Development & Seed Germination
- Contains a Natural Wetting Agent

Companion Biological Fungicide

- For Prevention, Control and Suppression of Soil and Foliar Diseases
- Quickly Activates ISR (Induced Systemic Resistance) in Plants
- Stimulates Healthier Roots
- Improves Nutrient Uptake
- Helps Prevent these Diseases: Botrytis cinerea, Powdery mildew, Fusarium, Pythium, Rhizoctonia, Xanthomonas & more

Growth Products, Ltd. • 80 Lafayette Avenue, White Plains, NY 10603
Toll Free: (800) 648-7626 • Fax: (914) 428-2780 • questions@growthproducts.com • www.growthproducts.com
Ready for Winter? continued from page 10

Cool season turfgrass plants reach their maximum tolerance to cold temperatures in late December or early January. After that, they start to slowly and gradually lose their cold temperature tolerance.

As mentioned earlier, for the turfgrass plants to survive, the crown must survive. The crown is comprised of living tissue and as such, needs energy to survive winter. While we don’t consciously think about the crown of the plant all winter, it is respiring, or breaking down carbohydrates, all winter to stay alive. The carbohydrates produced in fall allow the plant to survive winter. That is why fall turfgrass management practices are so important.

Deacclimation in Late Winter and Early Spring

Just as turfgrass plants gradually became acclimated to cold temperatures in fall and early winter, they lose their cold tolerance, or deacclimate, in late winter and spring. The cues for deacclimation are warmer temperatures and longer days. Deacclimation can happen very rapidly under warm air temperatures that we occasionally get in late winter or early spring.

Turfgrass plants deacclimate so they can begin to grow and take advantage of warm weather. Annual bluegrass (Poa annua L.) is the first turfgrass species to deacclimate and begin to grow when exposed to warmer temperatures. While this gives annual bluegrass a competitive advantage by starting to grow early in the season, it makes annual bluegrass susceptible to being killed by a sudden cold snap.

Warm weather in late winter and early spring followed by a rapid, large drop in temperature to near zero can have a devastating impact on all turf species, but especially annual bluegrass. And unfortunately, there is nothing a superintendent can do about it. Once a turfgrass plant has deacclimated, it is at the mercy of the weather.

In spring, slowly ease into your normal fertilization, mowing and watering programs. Do not fertilize until the grass has greened up on its own and is starting to grow. Mow at a higher height to even the playing surface and then roll to provide the desired putting green speed.

Don’t lower the mowing height until the grass is growing consistently and regular mowing is needed. Water to make sure there is sufficient soil moisture for good plant health.

I’m Winding Down

Hopefully, I’m not winding down, or at least just not yet, but I am winding down my professional career. This will be my last regularly scheduled column for The Perfect Lie. While I have enjoyed writing articles for The Perfect Lie, it is becoming increasingly difficult to find topics to write about. Plus, it is time for continued page 14
Engineered for the long haul.

John Deere ProGator 2020A

Stotz Equipment
52 Blackmore Rd, Evansville, WY
10801 Hwy 789 Riverton, WY
(800) 359-0250

C & B Operations
5121 Midland Rd
Billings, MT 59101
(800) 823-9242
all of you to read information from others to gain their insight.

Officially, I will no longer be the technical resource for Peaks & Prairies GCSA members but I will still be happy to answer your turf related questions on an informal basis. Just call or email as before and I will be happy to try to help.

I plan to attend the meetings when they are in Billings so hopefully I will still see many of you on an annual basis.

With my extra free time I plan to fish, golf and travel more. And hopefully I can convince Joe Stribley to join me on the streams and golf courses of Montana. You’ll probably be receiving a phone call from us to get inside information on fishing or to play your golf course or both.

We thank the Clark for the time he has spent sharing his knowledge with our members over the years. His expertise and familiarity of the region has always been beneficial to our members and his articles spot on for the seasons. Clark has made a larger impact on the region and the industry than he realizes.

Here are a few pictures of Clark over the years! The first picture with Dave Kopec dates back to 2000.

References:

Clark Throssell, Ph. D., is a turfgrass scientist and works with the turfgrass industry on technical and scientific issues. (This article can only be reproduced with written permission of the author).

Thanks for reading my articles, or at least parts of them. It has been my pleasure and honor to write them.

Enjoy your golf course. And enjoy our industry. I can’t imagine being associated with a better group of people.

References:

Clark Throssell, Ph. D., is a turfgrass scientist and works with the turfgrass industry on technical and scientific issues. (This article can only be reproduced with written permission of the author).
Power and Performance
from Hunter Golf & 2M Company

Because of Hunter’s patented technology, every serviceable element of the rotor is accessible through the top. Mechanical and electrical, big and small, you can get to every component without disturbing the playing surface. That means there’s no more digging, no more unsightly scars, and more importantly, one less item on a busy superintendent’s schedule.

2M can help you select the rotors you need, giving you peace of mind with the power and performance your irrigation system requires.

PROUDLY SERVING MONTANA
BILLINGS 406-245-3008 | BOZEMAN 406-556-8385
KALISPELL 406-755-5961 | MISSOULA 406-549-4427

2Mco.com

The Perfect Lie • November 2019 15
Fall Meeting & Trade Show ‘19!
The Briarwood Golf Results:

1st Gross: Justin Allred, Adam Kampbell, Pat Nowlen, and John Lafko

1st Net: Jay Glen, Brian Beach, Stephen Grass, and Zac Leader

2nd Net: Jason Busch, Ben Morris, and Danny Renz

#6 closest to the pin: Pat Nowlen

#16 closest to the pin: Marc Judice

Thank you Sean Sullivan, CGCS, host superintendent!

Thank you trade show participants!

2M Company
Amvac Environmental Products
C & B Operations
Compression Leasing
Excel Turf & Ornamental
Floratine Northwest
Granite Peak Pump Service
Great Basin Turf Products
Growth Products
HARCO Fittings
Johnson Distributing
Masek Golf Car Company
Midland Implement
Precision Pumping Systems
Rain Bird
Simplot Partners
Standard Golf
Steiner Thuesen, PLLC
Stotz Equipment
Superior Tech Products
Wilbur Ellis/The Andersons

FULL Break Sponsor:
AMVAC Environmental Products

Break Co-Sponsors
2M Company
Desert Green
Helena Agri-Enterprises
Stotz Equipment
Wilbur Ellis/The Andersons

GOLD Food & Beverage:
Growth Products
Helena Agri-Enterprises
Magic Valley Bentgrass
Stotz Equipment
Syngenta

Silver Food & Beverage:
C & B Operations
Grigg Rain Bird
Wilbur Ellis/The Andersons
Pacific Golf & Turf
FM Demo Field Trip!

Greg Baer
Irrigation Consultant
10027 N. Palisades Wy.
Boise, ID 83714
Ph. 208.859.1980
greg@baerdg.com
www.baerdg.com

Joe Chavarria
Amvac Environmental Products
15902 NE Noble
Vancouver, WA 98682
360-952-0399
joe@amvac.com
Montana Scholarship/Education Golf Event
Spanish Peaks Mountain Club, Big Sky, Montana

Thank you, Ryan Blechta, host superintendent

We appreciate our hole sponsors!

Hole Plus Display Sponsor:
Midland Implement

Hole Sponsor PLUS:
Winfield Solutions
Golf Northwest

Hole Sponsors:
2M Company
Baer Design Group
Billion Auto Group
C & B Operations
Excel Turf & Ornamental
Granite Peaks Pump Services
Green Meadow Country Club
Growth Products
Helena Agri-Enterprises
Johnson Distributing
Larchmont Men's Association
Masek Golf Car Company
Rain Bird
Simpplot Partners
Steiner Thuesen, PLLC
Whitefish Lake Golf Course
Wilbur Ellis/The Andersons
When we started talking about renovating the golf course, a lot of thoughts ran through my head. One of my thoughts was that the golf maintenance operation really has this course dialed in and it would be nice to ride out the remaining years of my career without any extra stress a renovation was sure to bring. Well, go figure, the membership voted and renovation was passed. This was consisting of a new irrigation system, tees, greens and bunker complexes. We needed to do a lot of planning so this would all go well.

What I learned quickly was that you control what you control. We are The Valley Club, a mountain course at 5300 ft. elevation in Sun Valley, Idaho. We are a private club, a second course to the majority of our membership. The Valley Club has 27 holes and our plan is to renovate the original 18 holes while always leaving 18 holes in play. Naturally, we selected a committee to oversee the renovation as a lot of our members had experienced a renovation at one of their other clubs. After plenty of membership meetings, it always came back to the question, “How much will it cost and how long will we only have 18 holes to play?” My answer was always the same, it depends on when we seed or sod the greens.

For a number of reasons, we decided to seed the greens. Another thing I found out quickly was that no matter how well you plan, often times plans need to be adjusted. Whether it’s a hundred-year flood or soil freezing 18-inches deeper than usual, you should plan for the worst and hope for the best. We couldn’t control how fast or slow the contractors installed irrigation or when they would spray the Better Billy bunker solution. One thing I could control were the greens. I made time every day to monitor them.

The main reason I had time for the new greens was because I had built a great team. I have two superintendents to oversee the daily operations at The Valley Club. Jason Sigmund and Ken Thornock would spend the first part of the day working hard on the 18 holes open for play. As play became busy on the 18 holes, Jason and Ken would filter over to the renovation for another eight hours and monitor irrigation, bunkers, cart-paths, tees and, of course, the greens. Jason and Ken made it easy for me to spend time seeding, fertilizing, rolling, monitoring and mowing the greens. Mowing the greens was refreshing and I enjoyed every single minute watching them mature.

During construction of the greens, we were sure to be present every step of the way and, as I probably already conveyed to you, we monitored their every move. The greens were shaped by Titzer shaping under Heritage Links and the golf course designers were Beau Welling Design, working with Davis Love III (DL3) Design. We worked closely with Shane Robichaud of the Welling firm. Shane was adamant about how the greens were to be constructed. Sub grades and finish grades were shot in 10-foot grids to be sure the finish grade mirrored the sub grade. After the finish grade was approved, the green surround complex would be sodded with Kentucky bluegrass. The green would be floated out one more time by Titzer and that’s where we took ownership.

For a number of reasons, we chose to seed the greens over sod. We developed a pre-plant program and applied that prior to seeding. In this article, I want to focus on technique - not fertility. We seeded the greens with T-1 bentgrass at a desired rate of 1.5 lbs. per 1000 square feet. Using GPS technology, I had the square footage of the green so it was easy to be sure I applied the correct amount on every green. For example, if the green was 5000 square feet I knew I needed 7.5 lbs. of seed. Even though I calibrated the seeder, I would go to each green with a known amount of seed and then return to the shop and vacuum out any remaining seed and weigh it to determine what I applied. One thing I found out while calibrating is it’s important to have plenty of seed in the hopper because the weight of the seed will help push the seed through the spreader. With the excess seed in the hopper, the rate will remain consistent while applying. I seeded in three directions at .5 lbs. in each direction. Using a drop spreader, it’s easy to not overlap enough, so be sure to give that some thought and practice. I put marks on the spreader to be certain the overlap was consistent each pass. I seeded in the early morning so the wind wasn’t a factor and also had plywood on the collars for turning the spreader so no bentgrass seed would contaminate the bluegrass surrounds. The next process was to accomplish good seed to soil contact. After seeding, we chose to dimple in the seed with a Sand-pro. I know there are other methods but I have always felt comfortable with dimpling.

Having done this before, I know the importance of dimpling in a green; it’s imperative to have zero missed areas. The slightest sliver missed while dimpling will not germinate. After talking with Joe Titzer (the shaper), he said he had seen a superintendent modify their Sand-pro to limit skips. So, we dug up an old sand-pro and our equipment managers Eric Heywood and Mike Beall put an extra row of tires on the Sand-pro to make seed to soil contact easy work. Not only did it speed things up, but the misses were virtually zero. When I seeded the first green, I went back and forth with the sand-pro and then did a cleanup lap and found that cleanup laps around the green made little tire ruts. On the next green, I drove in straight lines making no turns on the green surface. Notice in the photo, I continued page 22
We will miss our friend,
Bob Kline, GCS,
Olive Glenn Golf & CC,
Cody, Wyo.

As we were going to print with the newsletter, we learned Bob Kline had passed away last night, the night of November 21, 2019, with his wife, Connie, and family by his side. He was diagnosed with pancreatic cancer soon after this picture of he and Connie was taken at the 2019 GIS. Bob was attending the GIS as a recipient of the Bayer Grant.

As an 18-year member of Peaks & Prairies GCSA, and a 41-year member of the GCSAA, Bob will be missed by so many in the turf industry. Through the summer, Bob continued to help Mike Kelly at the golf course and enjoy playing golf, as his health would allow. Mike Kelly, GCS, captured the thoughts of many when he shared, “We will remember Bob as the easy going man with the big smile.” Yes, we will.

Our heartfelt condolences to Bob’s family and friends.
Valley Construction

dimpled the outside first without turning on the green; I only did small straight sections on the perimeter until it was complete. I took my time, and, after the perimeter was complete, I dimpled in the remainder of the green. I was sure to not miss any areas and stay on the green so no seed went in the bluegrass surrounds. I found that the moisture content needed to be perfect, it needed to be firm, but not wet where the seed could stick to the Sand-pro tires and contaminate the surrounds.

The growing season is short in Sun Valley, so we scheduled all the greens to be seeded no later than July 1. Having a few set-backs, we ended up seeding the last green on July 30. Like most superintendents taking on a renovation, my assistants and I signed up for renovation and construction classes at GIS the prior year to get the latest and greatest techniques. Seeding rates varied from class to class. But most everyone was consistent on mowing the newly seeded green as fast as possible. Everyone in class began telling their story on how quickly they mowed after seeding. Some as little as 10 and 12 days. The instructors had encouraged mowing quickly and to mow as low as possible to promote lateral growth. I quickly learned that too early will humble you and the mower will gouge the tender surface leaving behind scars that will take valuable time to heal. I also learned that golf course designers don’t design greens square and flat like university test plots.

So, if you haven’t put this article down yet, I’ll tell you when I mowed our greens. After 10 days I rolled them three times with the rear roller of a Toro 1000, then tried to mow them at 12 days. I mowed at .150 and for our greens it was too early, although I did the tug test on the leaf blade and the leaf snapped rather than uprooting the plant. But, it was still too early. Actually, most of the first green we mowed went well, with the exception of the four long lasting and unsightly gouges. I decided to raise the mowing height and hold off for another week before I mowed the second green. It was difficult because I really wanted to tell everyone we mowed in less than two weeks after seeding. The extra week made a huge difference as the root density was greater, which held the surface together perfectly. 18 days after seeding, we mowed at .225. The difference was incredible, with no gouges, and I could feel how much more stable the greens mix was under my feet. I mowed again the next day and did a clean lap as the edges felt stable, as well. After a week of mowing, we lowered the height. After a month, the greens were smooth and we then started using baskets.

I said I wasn’t going to talk about fertility but I wanted to mention a few things. I think there are many great grow-in programs and I am not going to recommend one over another. However, if you have taken any of the renovation classes, they talk a lot about quick germination by irrigating more frequently or covering the greens with tarps. We chose not to cover the greens for a couple of reasons - mainly because of labor and we

<table>
<thead>
<tr>
<th>New Peaks &amp; Prairies GCSA Members!</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Steven Kullbom</strong></td>
</tr>
<tr>
<td>Wapika Ranch</td>
</tr>
<tr>
<td>PO Box 1938</td>
</tr>
<tr>
<td>390 Colter Ave</td>
</tr>
<tr>
<td>Pinedale, WY 82941</td>
</tr>
<tr>
<td><a href="mailto:stevenkullbom@gmail.com">stevenkullbom@gmail.com</a></td>
</tr>
<tr>
<td>(209) 204-5406</td>
</tr>
<tr>
<td><strong>Brian Beach</strong></td>
</tr>
<tr>
<td>Bill Roberts Golf Course</td>
</tr>
<tr>
<td>1430 Cambray Loop</td>
</tr>
<tr>
<td>Helena, MT 59602</td>
</tr>
<tr>
<td><a href="mailto:brianbeach406@gmail.com">brianbeach406@gmail.com</a></td>
</tr>
<tr>
<td>(406) 447-8090</td>
</tr>
<tr>
<td><strong>Great Basin Turf Products</strong></td>
</tr>
<tr>
<td>Edward Murdock</td>
</tr>
<tr>
<td>Great Basin Turf Products</td>
</tr>
<tr>
<td>1815 W. Gentile</td>
</tr>
<tr>
<td>Layton, UT 84041</td>
</tr>
<tr>
<td><a href="mailto:edmurdock@me.com">edmurdock@me.com</a></td>
</tr>
<tr>
<td>(801) 710-7336</td>
</tr>
<tr>
<td><strong>Benjamin Morris</strong></td>
</tr>
<tr>
<td>Boulder Canyon CC</td>
</tr>
<tr>
<td>229 South 7th St.</td>
</tr>
<tr>
<td>Spearfish, SD. 57785</td>
</tr>
<tr>
<td><a href="mailto:Pearldrummer3388@gmail.com">Pearldrummer3388@gmail.com</a></td>
</tr>
<tr>
<td>(435) 592-0181</td>
</tr>
<tr>
<td><strong>Joshua Brown</strong></td>
</tr>
<tr>
<td>Stillwater Golf</td>
</tr>
<tr>
<td>PO Box 727</td>
</tr>
<tr>
<td>Columbus, MT. 59019</td>
</tr>
<tr>
<td><a href="mailto:Joshua.d.brown90@gmail.com">Joshua.d.brown90@gmail.com</a></td>
</tr>
<tr>
<td>(307) 921-0442</td>
</tr>
<tr>
<td><strong>Adam Snively</strong></td>
</tr>
<tr>
<td>Three Crowns Golf Club</td>
</tr>
<tr>
<td>1601 King Blvd</td>
</tr>
<tr>
<td>Casper, WY 82604</td>
</tr>
<tr>
<td><a href="mailto:asnively@threecrownsgolfclub.com">asnively@threecrownsgolfclub.com</a></td>
</tr>
<tr>
<td>(307) 321-4655</td>
</tr>
<tr>
<td><strong>Nathaniel Roberts</strong></td>
</tr>
<tr>
<td>Three Crowns Golf Club</td>
</tr>
<tr>
<td>1601 King Blvd</td>
</tr>
<tr>
<td>Casper, WY 82604</td>
</tr>
<tr>
<td><a href="mailto:phaseonesk8s@gmail.com">phaseonesk8s@gmail.com</a></td>
</tr>
<tr>
<td>(307) 472-7696</td>
</tr>
</tbody>
</table>

* home preferred address

---

**STEINER THUESEN PLLC**
Golf Course Architecture    Landscape Architecture    Irrigation Design

1925 Grand Avenue  Billings, Montana 59102  406-252-5545
www.steinerthuesen.com  info@steinerthuesen.net

22  Peaks & Prairies GCSA
Valley Construction wanted to have as little foot traffic as possible. For our grow-in program, we applied a pre-plant. After germination, we were scheduled to apply ½ pound of N every two weeks. With the USGA greens and water running every hour from day light to sun down, our fertility wasn’t enough. It was clear the greens required more due to leaching from the constant irrigation. We used organic and some ready available fertilizers and used about twice as much as we planned. After five weeks we started using the spray hawk to apply liquid fertilizer. In the photo below, the turf is 28-days old.

The growing season in Sun Valley, Idaho is short and our main focus is to have healthy turf and survive the long winters. The greens filled in quickly and, after four weeks, we decided to verti-cut and topdress all the new greens. At the time we only topdressed, using the walk behind spreaders to limit any tire marks. The book says get the mowing height down as quickly as possible. We were somewhat conservative and got the height down to .150. Winter comes quickly here and .150 is what we raise the greens height to for the winter. Next year, when we open in May, I feel the mowing height will be roughly .110 to .125. Winter came rolling in quickly, but we were able to get the Turfco 1540 topdresser out and topdress heavier.

Living in a dry climate, we don’t see a lot of disease pressure on our greens. We won’t be fooled again next year when we renovate the last nine holes. With all the heavy irrigation on the green, the disease snuck up quickly. Take all patch was the first to arrive and we responded quickly with a shot of Heritage Action. In October, we let our guard down slightly and got hit with some Pythium. Naturally, I questioned the diagnosis of Pythium to Richard Buckley at Rutgers. Buckley said I need to take a Pythium class because there are many new types of Pythium since I graduated. Live and learn I guess, but we’ll be ready next year. In short, what I have learned this year:

1. Build a good team before you start.
2. Be sure the greens are constructed properly from start to finish.
3. You will be taking care of the greens, so you should seed. Take your time and think.
4. Make sure you monitor greens every day to look for anything that may need attention.
5. You are responsible for the greens as soon as construction is done, so don’t mess it up!
Peaks & Prairies GCSA is dedicated to furthering the education of our members for the betterment of golf and its environment.