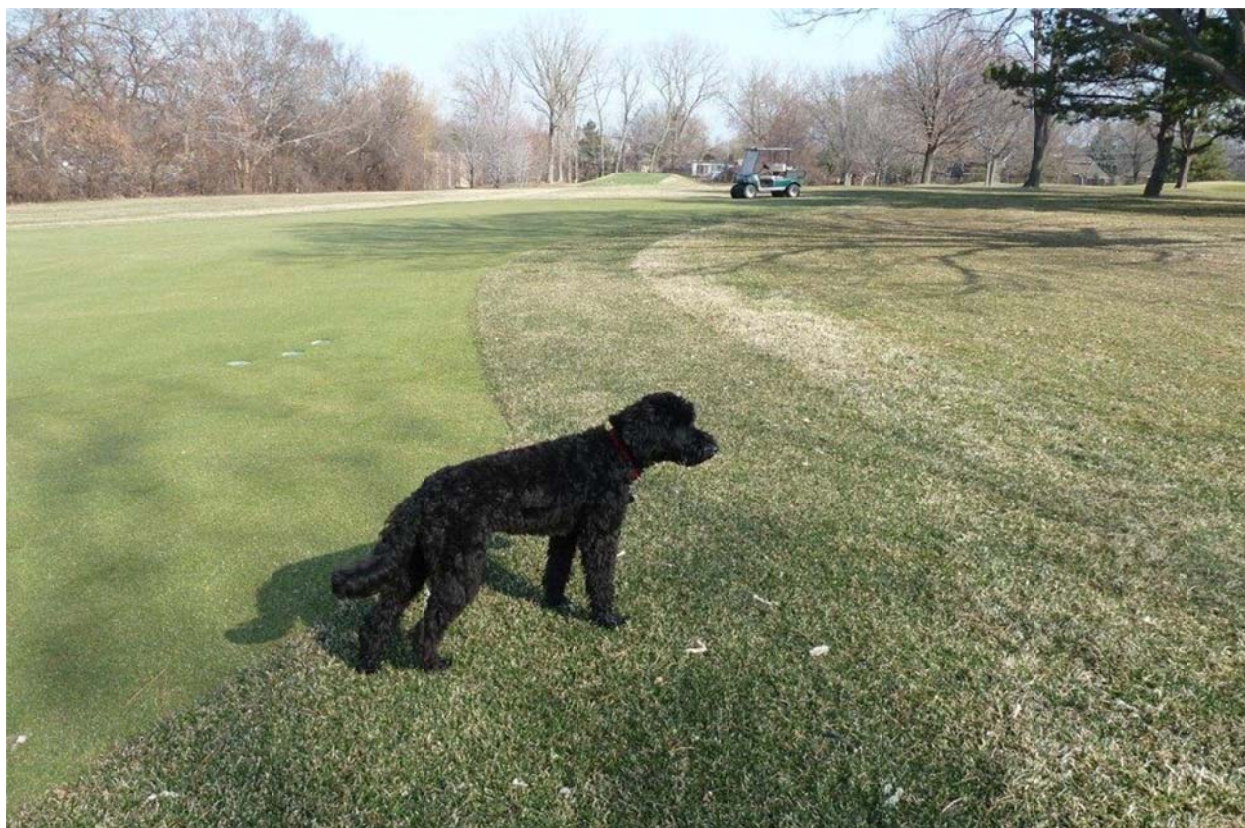




March 25, 2011 Scouting Report – Backwards temperature-wise: All Is Swell, Few Issues, Waiting for Poa Seedheads, Forsythia Flowers in Central IL, and Tim says <http://gddtracker.net>

Chicago/Northern Illinois Update: Derek Settle - DSettle@cdga.org

Desi says it's Spring. In the landscape turf is about the first to respond with green. Next up, we look for the color yellow. Daffodils along with forsethyia lead the way, not to mention dandelions. Soon thereafter it's off to the races. Star magnolia is one of my favorite early blooming woody ornamental favorites (*Mangnolia stellata* for the connoisseur). I even saw my first earthworm this week on Sunshine Course. Spring-friendly, I named him Charlie as he ventured near a small patch in bentgrass that had caught my attention on Sunshine Course. It is still striking, following winter 2010-11 plant health looks terrific. I'm now saying, "Round 1 goes to us!" Besides the visual, sounds of spring were also with me this week. Redwing blackbirds barked "my territory" in a nearby wetland as they rode moving reedgrass seedheads.

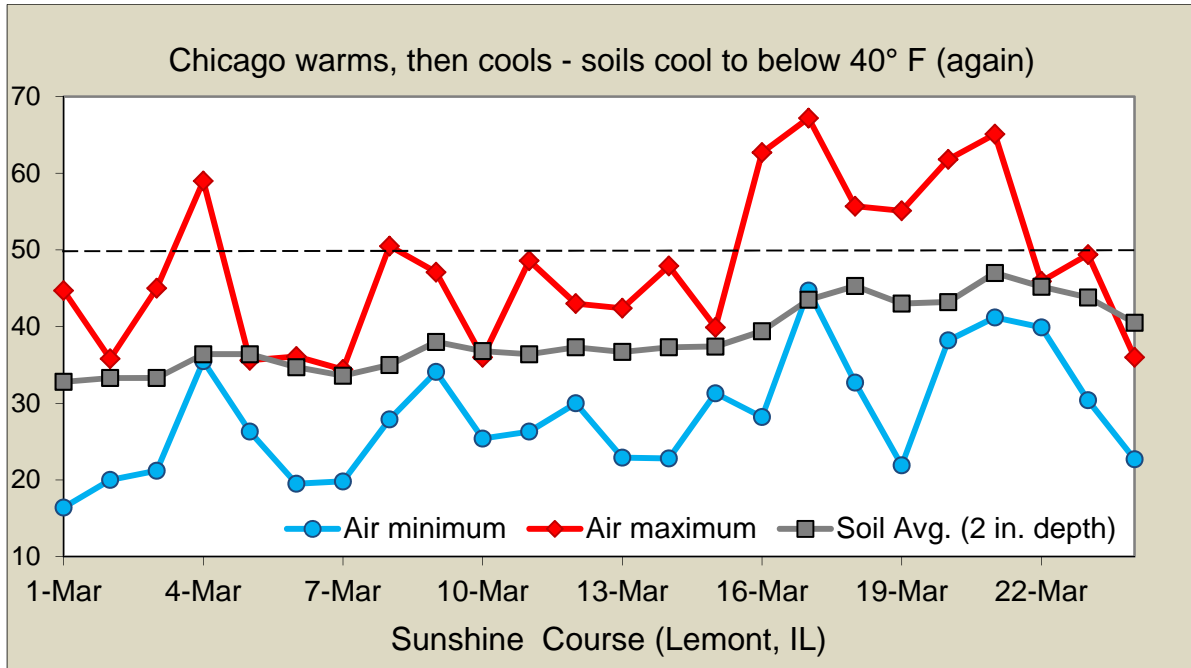


Desi likes to Scout! Here, we both notice greenup differences (*left-right*). 'Declaration' bentgrass fairway, vs. lowmow bluegrass sod (Desi's spot), vs. Kentucky bluegrass rough. *Settle 3-19-11*

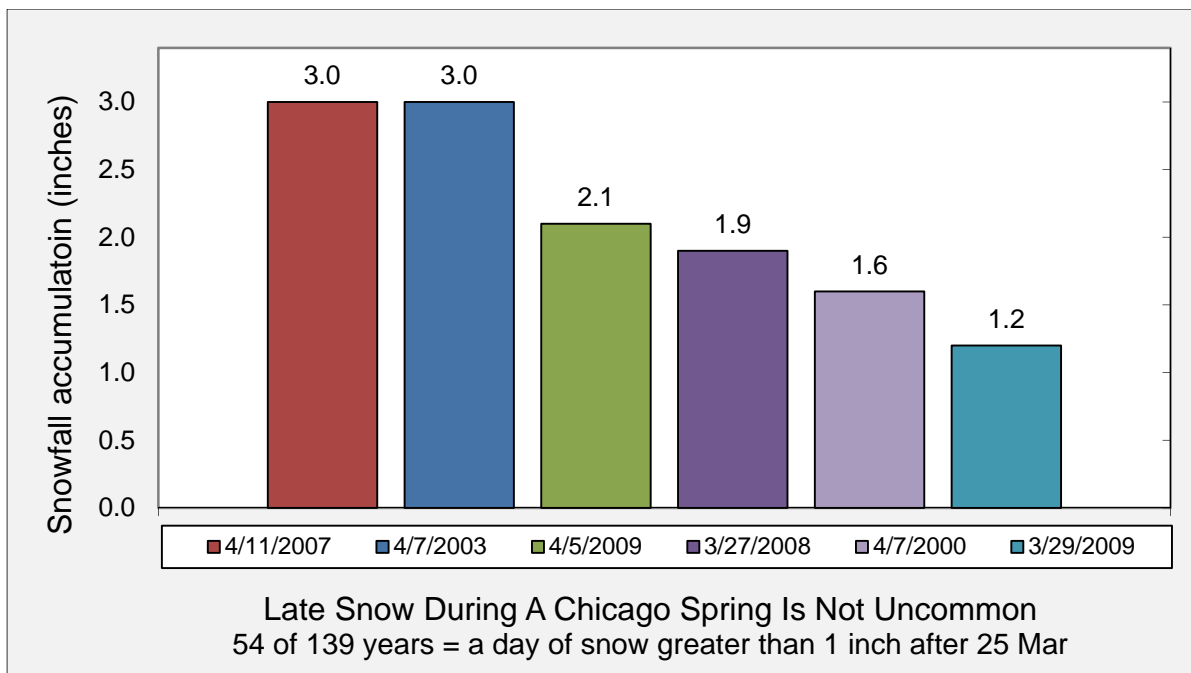
If you like the outdoors, everyone I know does, it is a nice time. We finally get to see how plant material made it through the winter. I tell you, from my office (outdoors), it looks pretty good.

Weather Update – Meteorologists get a little cranky this week...and so do we!

“Too cold, too dry, too far south. That, in a nutshell, is the reasoning behind yanking all mention of precipitation through Monday. While the weekend will be cold (to the tune of roughly 15 degrees below average by day, and 5-10 degrees by night), the southward push of Polar air and high pressure should drive the snow south of us as well.” *G. Sebenste, Staff Meteorologist - Northern Illinois University*



Uh Oh. The forecast returns to gray cloudy skies with highs of 30°F to 40°F and 20s for lows.



Say What? Although the calendar says spring, Chicago still has the potential for more snow.

Phenology – a way to anticipate and correctly time for turfgrass issues

“Plants that are used for phenological observations are called indicator plants. Good indicator plants should be common to a wide geographic area, hard, easy to recognize, and easy to grow. They should have short, well-defined bloom periods, with blooms and fruit that are recognizable from a distance” PennState, 2008 <http://pubs.cas.psu.edu/FreePubs/pdfs/uj248.pdf>



Boarder forsythia near Decatur, IL. Rincker 3-23-11

I used to not know much about phenology. I remember my first experience. I saw some research in the Turfgrass Research Booklet handed out on 18 June, 1997 in Wichita, KS.

Researchers at K-State and the University of Nebraska were studying 11 woody ornamentals that had bloom characteristics that might help timing of crabgrass preemergence. The goal was to find a flower that would bloom 1-3 weeks prior to crabgrass seed germination in thin turf stands. They noted precise timing remains important when using a preemergent material with a shorter residual, such as pendimethalin. They found flower wither of 3 landscape shrubs worked well. However boarder forsythia flower wither, thought to help turfgrass managers with crabgrass preemgence timing, was inconsistent year to year. Forsythia did not make the cut. Three others were deemed useful for crabgrass preemergence timing in both Kansas and Nebraska.

Flowering ornamentals to guide application of preemergent herbicides in the Midwest

Rational: “Rather than using a standard calendar date to determine preemergence herbicide application time, some have recommended basing application time upon flowering of commonly used ornamentals. Some recommendations have been to apply the herbicide “when forsythia blooms wither” or “when the redbud begins to bloom.” However, the accuracy of these recommendations has never been established.”

Results: Considering both locations and emergence in bare soil or thin turf, end of bloom was generally a more consistent indicator of crabgrass emergence than start of bloom. Those ornamentals whose flower wither most consistently predicted crabgrass emergence in thin turf were daffodil (*Narcissus* spp.), lilac (*Syringa vulgaris*), and redbud (*Cercis canadensis*).

Table 1. Flower wither of 3 ornamentals that consistently preceded crabgrass seed germination

| Ornamental | 1995-Manhattan, KS | 1996-Manhattan, KS | 1997-Manhattan, KS |
|---|--------------------|--------------------|--------------------|
| Daffodil flower wither | 5 Apr | 18 Apr | 29 Mar |
| Lilac flower wither | 1 May | 7 May | 8 May |
| Red Bud flower wither | 28 Apr | 7 May | 17 Apr |
| Crabgrass Germination <i>thin turf</i> | 22 May | 16 May | 5 May |

Adapted from: Fry, J., S. Rodie, R. Gausson, S. Wiest, W. Upham, and A. Zuk. 2001. Internatioinal Turfgrass Society Research Journal. 9:1009-1012.

Tim Sibicky, MS - TSibicky@cdga.org Manager of Turfgrass Research
Growing Degree Day Tracker for Seedheads

Each spring, we scout early for what some might call the first arch enemy rival of the season, annual bluegrass seedheads. There is special concern of seedheads where populations of annual bluegrass are high and use of plant growth regulators has the potential to reduce or eliminate seedhead production. During the months of April-May is when the flush of seedheads typically occurs in Chicagoland. Issues including reduction in surface uniformity and changes in overall turf color from the profuse seedheads can raise golfer concerns. Prevention of the reproductive phase by use of plant growth regulators is thought to offer a benefit to the annual bluegrass plant. It enables the plant to save energy and resources that it would otherwise expend during the costly reproductive growth phase, a phase that would only further jeopardize plant health prior to entering the stressful summer months. Proper timing of growth regulators is extremely important and application can be determined through scouting for the earliest seedheads in locations having the warmest microclimates, use of flower indicators, and/or growing degree day models.

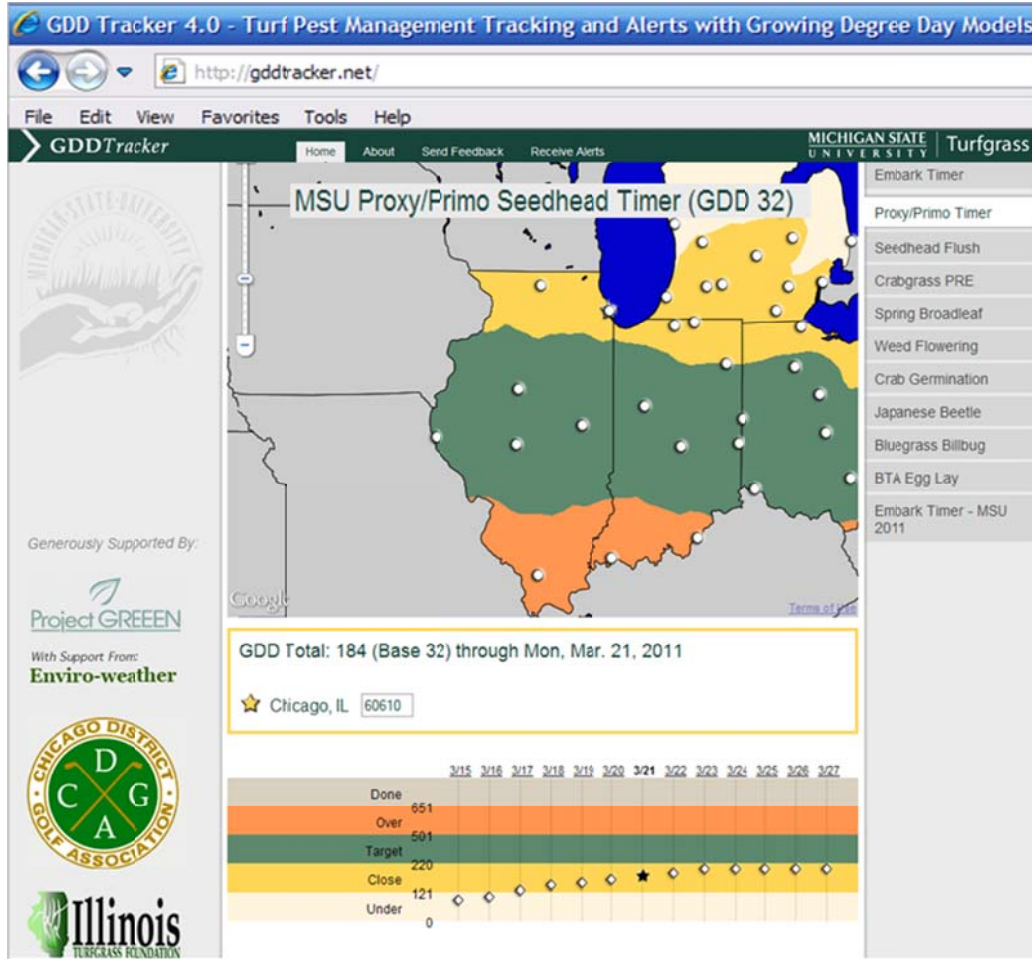
Growing Degree Day (GDD) Tracker <http://gddtracker.net>

What are growing degree days? Growing degree days are an accumulation of heat indices relating to the development of plants, diseases, and insects according to environmental temperatures. Growing degree days are not necessarily considered a new technology, but



A sample of *Poa annua* on was brought into our greenhouse maintained at 68° F one week ago. The sample in the warmth of the greenhouse has accumulated an estimated additional 245 degree days above the 149 that it had on the date of sampling for a total 394. *Settle* 3-25-11

development of degree day models and the internet has allowed for is the quick transmission of weather information and the operation of automatic degree day calculators. It has also enabled use of future weather forecasts to predict how growing degree days will progress over the coming week, should the forecast hold true.



The web based tool called **GDD Tracker** developed by Dr. Ron Calhoun at Michigan State University allows for the tracking of degree days throughout the Great Lakes region. GDD Tracker now services four states: Michigan, Indiana, Illinois, and Ohio. The website can be accessed at <http://gddtracker.net> and it is very useful providing a series of timers including seedheads (proxy/primo and embark), crabgrass preemergence, spring broadleaf, weed flowering, Japanese beetles, bluegrass billbugs, and black turfgrass ateniensis. The maps of the region on the website are color coded for three application timings: under (early), close (target) and over (late). The website allows turfgrass managers to pinpoint their location by zipcode and receive email alerts according to data closest to their specific location so that they can make the best decision on when to apply preventative treatments. Currently, the Chicago region is near the 200 degree day mark using 32 degree day calculation. Using Proxy/Primo as an example, the target range for seedheads starts at 220 and runs to 500. Recent colder temperatures and their continuation into next week indicate there will not be too much degree day accumulation in the coming days and we will not reach the target until possibly the first week of April.

Final images – the landscape at a glance from Dacatur to Chicago



Central IL: Boarder forsythia blooms, an indicator for *Poa annua* seedheads. *Rincker 3-23-11*



Chicago IL. Area lawns received a dusting of snow that fell Wed-Thu evening. *Settle 3-24-10*

We go back to the look and feel of winter
Derek, Tim, Nick and Chris The CDGA Turfgrass Program