As expected the surge of “warm” temperatures jump started growing conditions. The compressed Spring is already posing some interesting challenges to “get the work done that needs to be done” said one NYS landscape professional. Phenological indicators (inset image below) that have been lagging as much as three weeks behind the 30 year average are catching up quickly with many forsythia, pear and magnolia’s in multiple stages of bloom across the region. Blooming as well are the non-grassy plants in lawns and landscapes. Violet among them, as well as the winter annuals such as henbit, chickweed, and annual bluegrass. With blooms abound, extra care is needed to prevent injury to native and imported pollinators in the landscape. With public attention focused on this issue it behooves professional land managers to implement Best Management Practices when using pesticides and fertilizers in the landscape when pollinators could be present. See the BMP’s @ http://nysgolfbmp.cals.cornell.edu/pollinators/.

The recent warm-up has accelerated soil temperatures with 2” readings into the upper 60’s to the low 70’s. Weather forecasts are calling for prolonged dry period over the next week and some models calling for dry conditions to persist the next 3-4 weeks. This will accelerate the need for early season preventative management of areas with historical soil borne pathogen problems. Fairy ring, take-all patch and summer patch compromise root function either through direct infection or by creating water repellent conditions. The expected dry weather will likely exacerbate any these issues. A few notes of caution, first be sure soils are well aerated to receive a soil applied fungicide and allow it to penetrate the root zone. Second, be mindful of the amount of growth regulation being imposed from the various Spring applications, i.e., soil applied DMI fungicide, seedhead suppression, Normal PGR program, preemergence herbicide, etc.

The forecast for continued dry weather is often a welcome condition as it provides turfgrass managers a measure of control over soil moisture. However, moisture stress on unirrigated sports fields and lawn areas can limit growth and the potential to recover from traffic. Slow growing turf grasses from low soil moisture at this time struggle to compete for space with perennial weeds and fill voids where summer annual weeds can invade.
Frequently Asked Questions (FAQ): I am concerned about some of my turf areas that were super saturated earlier this Spring and are now beginning to dry out. Could Pythium root issues be the cause?

Spring reports from a few diagnostic labs are indicating there is an increase in early season root problems, notably Pythium spp. disorders. The wet and cool conditions, especially on historically shallow rooted plants such as annual and Kentucky bluegrass, were not conducive to root expansion, especially increasing root depth. Let’s be clear, managing for greater root depth is critical. Simply managing for more roots, especially surface roots, will NOT lead to a resilient surface.

The Pythium root disorders can be confusing and require different types of control programs. Pythium root rot (PRR) occurs in over-saturated conditions or areas with poor drainage. Disease outbreaks can occur following high rainfall events accompanied by high temperature stress. Symptoms of turf infected with PRR initially look wilted, and then progress into yellow or dark-colored areas occurring in irregular, mosaic-like patterns occasionally following drainage patterns. Individual plants may have rotted crowns and roots. Several Pythium spp. have been associated with PRR throughout the country. Pythium root dysfunction (PRD) is a disease that was recently described in North Carolina on young (<5-7 years) bentgrass putting greens. Symptoms of PRD include plants that are initially wilted and chlorotic then develop a yellow-to-orange foliar decline. Infected roots will simply be tan or buff and lack root hairs, one of the distinguishing characters between PRD and PRR. Unlike PRR, symptoms of PRD are most severe during periods of hot and/or dry weather and develop on exposed, dry areas of turf as opposed to low-lying areas most commonly associated with PRR.

Fungicides will be more effective if used preventively rather than curatively. On sites with a history of disease, treat preventively every 21-28 days when soil temperatures at a 2-inch depth are between 54-75°F (12-24°C), the temperature range under which P. volutum is most active. Interestingly the recommendations from Kentucky publication states: Sprayed fungicides should be applied in at least 4-6 gal of water/1,000 sq ft or followed immediately with 0.125 inch of irrigation to wash fungicide into the root zone. Are you putting out enough water to get control?

Weed Management Starts with ID!
Effective weed management programs begin with proper identification. The Cornell Turfgrass and Landscape Weed Control ID website developed under the leadership of Horticulture Professor Jenny Kao-Kniffen offers an easy to use identification tool for grass and broadleaf weeds in turf and landscape settings. This website has an easy to use process of elimination of possible plants by asking questions about visible plant parts. It has an adaptive design so it will work on ALL your mobile devices as well as your desktop. Recommendations for control include products available for use under Child Safe Playing Field Act. Access this great resource at:http://http://turfweeds.cals.cornell.edu/