## DEALING WITH CRABGRASS IN THE FIELD

Thomas M. Smith President, Grass Roots, Inc. East Lansing, MI

1988 will be remembered as the worst drought in recorded history. For Grass Roots, Inc., it was an unusual year because, through the beginning of July, most lawns not properly watered were completely dormant. During this dormancy, no evidence of insect or weed problems was present. That quickly changed when we received our first major rain in mid July. A year that was, up to then, uneventful from a pest management standpoint, turned into a very difficult season.

While not much happened before the July rains, it was not a time without worry. My biggest concern was that clients would attempt to water during the drought, but would water poorly. This could have led to severe problems from insects and increased weed germination.

When I realized the drought was really a drought, I sent a letter in early June to all clients explaining turf dormancy and instructing them not to water unless it could be done daily at mid-day using light rates. Most people without automatic sprinkler systems could not follow these recommendations. Water bans during the day in several communities kept many others with sprinkler systems from watering.

Next we ceased most applications of fertilizer and weed control. Only accounts that were watering properly received any treatments. We continued to monitor other accounts that were dormant so as to stay on top of the situation. Our programs follow an Integrated Pest Management approach so we have a great deal of flexibility as to what we apply, or, in this case, do not apply, to the client's lawn.

Once we made this adjustment in June, things ran smoothly until the first July rain. Conditions changed dramatically as the rains continued, leading to tremendous germination of summer annuals including crabgrass. High temperatures continued so crabgrass growth was accelerated. Pre-emergents did not appear to be effective, probably due to the lack of spring rainfall. This accelerated growth made control very difficult. We sprayed Acclaim for crabgrass control as well as Turflon II to control the broadleaf summer annuals. But it really felt like a losing battle as new germination continued throughout August.

During this time, the turf began to come out of dormancy. It was clear that the drought left its mark as areas did not show recovery. There appeared to be no set pattern or conditions for this drought damage. It occured on a variety of turf with varing degrees of maintenance. These thin or dead areas quickly became infested with weeds such as crabgrass.

While we skipped applications in June, it became clear that

increased fertilization for turf recovery was important in September. We began fertilizer and weed control treatments in Augustearly September and made additional treatments in late Septemberearly October. We started to see some good results of turf recovery and weed control after this application. We continued to monitor accounts throughout the remainder of the season and began our late fall applications in early November.

Nature was again working against us as rains and cold temperatures prevented us from applying late fall nitrogen on all the accounts scheduled. The season that began with the worst drought in recorded history ended as a year with above average rainfall.

What's in store for next year? I'm afraid to even think about it. Many are predicting another drought pattern. As we look back on 1988, I think we can draw on some hard-learned experience.

To summarize:

- Pre-emergents alone were not an effective crabgrass control.
- Monitoring of weather, specifically rain patterns, is critical for pre-emergent timing, and to predict crabgrass germination.
- Conditions can change rapidly as was evidenced in July after the first major rain.
- Turf recovery from drought damage will be an important consideration for 1989.

As for crabgrass control, I think it is time to look at some alternative programs. Specifically, we should be investigating different schedules for pre- and post-emergent control. Split application of pre-emergent in April and late May and preemergent/post-emergent combined applications in late May are two strategies I am considering for next season. In both cases, we will continue to spot with a post-emergent throughout the season as needed.

Finally, if we learned one lesson from 1988, it should be that there is not one approach that works in every situation. We need to be adaptable in our programs and become turf managers again, not just turf applicators.