Speaking for myself, I am concerned about the importance of "balance". Balance for the association of which you and I are a part. I think this viewpoint is seldom if ever stressed enough. Nonetheless, balance is needed.

Look into the region of nature and you will see this clearly. There must be balance between rainfall and sunshine if turf is to grow and thrive. By introducing a new species in order to control other species, we have occasionally found ourselves in a state worse than the first. In the soil there must be a balance between alkaline and acid — tipping the scales in either direction could prove to be unheatthy.

Balance. Let's not forget it. There may be something else you have forgotten to put on the scales. I am sure it is worth a second look.

And now, if you would remember with any kindness the man who wrote this column for the past year, remember he was very concerned about the continued success for all of you and the Midwest Association of Golf Course Superintendents.

Ed Wollenberg, President

WINTER FEEDING OF LAWNS

by Robert W. Schery
Director, The Lawn Institute

Today we are experiencing something of a fad with winter survival lawn fertilizers now being made by several lawn product suppliers. These are excellent fertilizers but the name implies that survival of the lawn through winter is dependent upon a particular formulation of nutrients which makes the lawn more tolerant of cold. The familiar varieties of Kentucky bluegrass, fine fescue and bentgrass are quite hardy without this, however, except possibly in Alaska and the northernmost reaches of the Plains States. However, research does indicate that some of the southern grasses can be made slightly more resistant to cold by increasing their regimen of potassium but, even then, the added tolerance is a degree or two and is usually overshadowed by the wild fluctuations winter weather brings.

This is not to say that there won't be some difference in cold tolerence between kinds of grass and between varieties of them. At the Lawn Institute we have experienced winter demise of one bluegrass introduced from the eastern Mediterranean but never loss, due to cold, of any of the conventional domestic and north European varieties. The same is true of the fine fescues and bentgrasses such as Highland or Penncross, the other main cool season lawn species. It is primarily for these grasses that the special winter fertilizers are advocated, since hardiness with southern grasses is so much more related to climatic vagaries than a fertilization program.

Research relating winter performance of lawngrasses to fertilization has received some special emphasis at both Michigan State University and Virginia Polytechnic Institute. The conclusions are not entirely in agreement, explainable largely by the climatic differences in the two states. I grew up in a border state, Missouri, and can quite agree with the Virginia conclusions for the sourthern portion of the bluegrass belt. Without getting involved in the details and qualifications, the Virginia position is basically one of generous high-nitrogen fertilization in autumn but light feeding in warm weather.

It is felt that nitrogen, as the chief growth-promoting nutrient for grasses, is best utilized at colder times of the year when accrual of food, through photosynthesis, exceeds its exhaustion, through respiration and forced growth. It is recognized that for cool-season grasses, food-production tails off as temperature gets much above 80° while food use intensifies, thus creating a metabolic deficit. There is no evidence that in this climate familiar lawngrasses are any more likely to be lost in winter when fertilized heavily rather than lightly with nitrogen.

Dr. Beard, in Michigan, has run elaborate experiments in cold chambers, demonstrating certain differences between grasses in tolerance of cold which vary somewhat with ice cover, slush and so on. Highlight and Pennlawn varieties of fine fescue have winterkilled significantly less in northern Michigan than Common and Olds, for example, and bentgrass has been more durable than annual bluegrass.

In lawns, however, all grasses survive well at the usual soil temperatures. Nevertheless, the researchers do seem to feel that there is some advantage in not having nitrogen disproportionately high vis-a-vis phosphorus and particularly potassium, when readying a turf for winter. Dr. Gilbert at North Carolina finds this to be the case at the northern limits of the bermudagrass range, also. It is not necessarily a question of resistance to cold in the North but a multiplicity of factors. Studies by Dr. Goss in western Washington, a much milder climate than Michigan, show that winter diseases may have considerable influence upon turf quality and that higher proportions of potassium may prove helpful. Balanced fertility seems to be more the need than growth stimulation.

Obviously, the usefulness of special winter fertilizers depends upon many factors. Perhaps, the situation can best be summed up by noting that balanced fertility is advantageous so far as the general tone of a lawn is concerned and, that depending upon local soils, climate and amount of nitrogen previously used there can be some balancing advantages for winter-fertilizers containing increased proportions of phosphorus and potassium. They are seldom critical for survival of the proven bluegrasses, fescues and bentgrasses, however, and, indeed, towards the southern limits of the bluegrass belt might be as appropriately used in summer as in winter.

In the original 48 states one hardly need fear use of the familiar high-nitrogen fertilizers in autumn. Rather, I would recommend generous fertilization in September and October, for bluegrass, fescue and bentgrass lawns with either a conventional or a winter formulation (this latter especially where nitrogen has been used alone previously). Certainly color and good looks are enhanced in autumn and through winter by seeing that the lawn has ample nitrogen for all its purposes.

At this particular season, of course, we are reaping the benefits, or lack thereof, of what we did last fall. More important, now, we should turn our attention to either winter feeding for early spring benefit or early spring feeding for the same purpose.

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I would like to thank Mr. Lee Record, Mr. Stan Rachesky and Mr. Ed Wollenberg for their monthly columns, along with many others who contributed in 1969.

Merry Christmas and a Happy New Year to all members and their families of the MAGCS.

Editor, Dick Trevarthan