## The Naturalistic Golf Course

Max Terman, a faculty member of the Biology Department at Tabor College in Hillsboro, KS, has opened an important scientific discussion regarding the influence of a golf course on wildlife habitat. In his article, "Natural Links: Naturalistic Golf Course as Wildlife Habitat" he uses a comparison between two adjacent properties in Kansas. One managed area is the Prairie Dunes Country Club and the other is the Sand Hills State Park. The Sand Hills Park is considered a low impact area with minimal human disturbance, while the golf course regularly considered in the top 25% of the world is considerably more managed and certified as a cooperative sanctuary through Audubon International.

This study surveyed the abundance and diversity of bird species on each property. He classifies the bird population according to a previously developed system that labels them, urban avoiders, urban exploiters, and suburban adaptable species. While the two managed lands had shared many species, the golf course had more urban exploiter and suburban adaptable species. Simply, the golf course was able to sustain species that had unrestricted habitat needs and higher tolerance for disturbance, while the State Park had habitat sensitive birds that require areas away from human disturbance. Interestingly, the State Park had more species (greater diversity), it had 15 different species that were not found on the golf course, however, the park had less individuals, i.e. a greater number of birds in total were found on the course.

The article continues to discuss the ecology of a golf course as it pertains to fragmenting habitat, how large unused areas are vital for encouraging threatened species, the role of architects, and how golf course development done properly is a progressive approach to habitat preservation. The article concludes by elaborating on management topics that most turf managers are familiar with, but relates them to how they effect the wildlife habitat. Golf course management should be viewed as ecosystem management. "When niche, corridor, buffer zone, ecotone, foraging area, and nesting site, join bogey, par, birdie, and eagle on a naturalistic golf course, all take on more meaning and significance."

From: Terman, M.R. 1997. Natural Links: Naturalistic Golf Courses as Wildlife Habitat. Landscape & Urban Planning, 38:183-197.

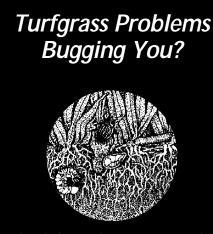
## Selecting Water Efficient Bluegrass Cultivars

As concern for water use in turfgrass management grows in many parts of the country, the need for cultivars that use less is a primary component of the solution. Furthermore, many unirrigated, high use turf areas could benefit from cultivars that are wear tolerant, have adequate recuperative ability, and are aesthetically pleasing.

Dr. Scott Ebdon, former graduate assistant at Cornell, now Assistant Professor at the University of Massachusetts, and Cornell Turfgrass Team member Marty Petrovic have attempted to develop a system to evaluate the water use of Kentucky bluegrass cultivars. This system could be used by breeders through the collection of simple measurements such as leaves per shoot, leaf width, leaf angle, vertical leaf extension, etc.

The results of this exhaustive investigation suggest that cultivars that have a higher shoot density and more horizontal leaf orientation, as well as cultivars with slow vertical leaf extension and narrow leaf width, use less water. This type of information could be used by turfgrass breeders who are striving to improve water use efficiency among bluegrass cultivars.

From: Ebdon, J.S. and A.M. Petrovic. 1998. Morphological and Growth Characteristics of Low- and High Water Use Kentucky Bluegrass Cultivars. Crop Sci. 38:143-152.



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## Scanning the Journals

A review of current journal articles

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