# RUTGERS New Jersey Agricultural Experiment Station

# 2007 Turfgrass Proceedings

## The New Jersey Turfgrass Association

In Cooperation with Rutgers Center for Turfgrass Science Rutgers Cooperative Extension

### 2007 RUTGERS TURFGRASS PROCEEDINGS

#### of the

### New Jersey Turfgrass Expo December 4-6, 2007 Trump Taj Mahal Atlantic City, New Jersey

The Rutgers Turfgrass Proceedings is published yearly by the Rutgers Center for Turfgrass Science, Rutgers Cooperative Extension, and the New Jersey Agricultural Experiment Station, School of Environmental and Biological Sciences, Rutgers, The State University of New Jersey in cooperation with the New Jersey Turfgrass Association. The purpose of this document is to provide a forum for the dissemination of information and the exchange of ideas and knowledge. The proceedings provide turfgrass managers, research scientists, extension specialists, and industry personnel with opportunities to communicate with co-workers. Through this forum, these professionals also reach a more general audience, which includes the public.

This publication includes lecture notes of papers presented at the 2007 New Jersey Turfgrass Expo. Publication of these lectures provides a readily available source of information covering a wide range of topics and includes technical and popular presentations of importance to the turfgrass industry.

This proceedings also includes research papers that contain original research findings and reviews of selected subjects in turfgrass science. These papers are presented primarily to facilitate the timely dissemination of original turfgrass research for use by the turfgrass industry.

Special thanks are given to those who have submitted papers for this proceedings, to the New Jersey Turfgrass Association for financial assistance, and to Barbara Fitzgerald and Marlene Karasik for administrative and secretarial support.

> Dr. Ann Brooks Gould, Editor Dr. Bruce B. Clarke, Coordinator

#### ENVIRONMENTAL TURF CRAFT FOR SPORTS FIELDS

#### Kevin Trotta<sup>1</sup>

At the intersection of the natural world and the human world lies the athletic field. It is the integration of nature's raw materials (grass) and man's propensities to play and to shape his surroundings. As a blending of man and environment, the athletic field serves as a natural, cultural resource. It provides an opportunity for people to be outside, where our species evolved, naturally linked to the dynamic green and blue complexity around us. In this time of heightened environmental awareness, the challenge for those of us who manage these fields is to find cleaner, more sustainable, and "greener" means of doing so. Environmental Turf Craft represents an approach to this challenge as it seeks to reconcile turf management and environmental stewardship.

A craft is a marriage of art and science. The requisite goal of the sports turf manager here in the eco-conscious 21st century is to become a master craftsman, responsibly and expertly practicing this kind of art informed by science. Environmental Turf Craft is a convenient name for a hybrid system that incorporates the most effective and sustainable aspects of Integrated Pest Management, organic systems, conventional management, and environmental Best Management Practices. As in modern integrative medicine, if it works, use it. The objective is balance: to maximize the well-known benefits of turfgrass while minimizing negative impacts.

This proactive mindset provides the perspective to better evaluate the "big picture" ramifications of our operations. We can review our management decisions in ways that transcend purely agronomic criteria. Some typical turf craft considerations might include:

- Is our 30-year-old tractor negating the turf's air quality benefits?
- Are unreasonably low cutting heights sustainable?
- Can we utilize some natural organic fertilizers in our programs, a practical answer to a question of waste?
- Is our equipment tuned for peak performance?
- Does continuing education allow us to accurately identify turf problems and their causes?
- Shouldn't pesticides be comparatively scrutinized before selection?
- Aren't there special considerations in the sandbased root zones of some sports fields?
- How and where is our mowing equipment washed?
- Is fertility mismanagement canceling out the water purifying benefits of turf?
- Are we addressing a pest issue with chemical intervention when a cultural modification will do?
- Has an irrigation audit enabled the most efficient use of a natural resource?
- Are the attitudes and actions of our industry visible and recognizable as those of environmental stewards?

Environmental Turf Craft is a balanced approach that relies on science to steer the course. It's more than an amalgam of tools and techniques. When our daily management decisions are guided by the underlying principles of environmental responsibility, our strategies and procedures are subtly and positively influenced. We abandon the clumsy, product based, heavy-handed practices left over from turf management's infancy in the last century. We become aware of our roles as navigators and pilots within the envi-

<sup>&</sup>lt;sup>1</sup>New York Team Captain, Global Sports Alliance, an official partner of the United Nations Environment Programme, and Grounds Manager and IPM Coordinator, Rockland Central School District, Garnerville, NY.

ronmental movement. We take our place as leaders in this new kind of pragmatic environmentalism where social and economic as well as ecological objectives are balanced. We become active caregivers in the process of earth's healing: as toxic, abandoned mining sites become oxygen generating golf courses; as landfills are sealed and reborn as health promoting athletic fields; as people get out of their homes and offices and, seeking recreation and life sustaining fresh air, join us on our turf. It's unfortunate that some misguided critics of turfgrass see us as an environmental problem when obviously, we're part of the solution.

What could be greener than grass?



*Cooperating Agencies:* Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and County Boards of Chosen Freeholders. Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity program provider and employer.