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**Pesticides on Turfgrass**
Jay Gren, Ph.D., University of California, Riverside
Bruce Kadir, Dow Agro Science

Maintenance of high quality sports turf, including golf courses, rely on the adequate use of pesticides in order to protect against pests, and restore the competitive balance in favor of the turf. This session will cover two facets of pesticides on turfgrass. One will be the fate of pesticides in the environment and strategies for minimizing pesticide runoff and offsite movement. The other will cover cultural and chemical practices for managing specific weeds in turfgrass with various stressful conditions. Examples will be drawn from golf courses and professional sports fields, all the way down to your children's blow-up soccer fields, with suggestions how you can help create and maintain a safer and better performing turfgrass.

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**Evaluating and Amending Soil**
Kendall Kortz, Ph.D., Calif State Polytechnic Univ, Pomona
Dirk Muntean, Soil and Plant Laboratory, Inc

Maintenance of high quality sports turf, including golf There are many types of soils used for the construction and establishment of turfgrasses on sports fields. Poor soil physical properties and fertility imbalances reduce turf health, quality, and performance. Many potential problems can be solved by thorough examination and correction prior to turf planting. This session will provide the turf professional with a check list of potential problem areas that can be adjusted or corrected prior to turf installation by considering types of field materials or soils, pre-plant fertilizers, and organic amendments.

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**Synthetic Infill vs. Natural Turf**
A.J. Powell, Ph.D., University of Kentucky
Darren Gill, FieldTurf

The examination of construction, maintenance, renovation, repair and other costs for a natural grass field and synthetic infills including as testing for safety and performance. The differences between polyethylene yarn type synthetic infills and nylon non-infilled fields that have higher sports shoe traction test results and the ball bounce and rebound that closely resemble the performance of a natural field will be explored.

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**Efficient Irrigation Management for Sports Fields**
Dave Minner, Ph.D., Iowa State University
Lyndia Wighman, Hunter Industries

Learn why sprinklers have brown "doughnuts" around them in your turf? Why are some areas dry versus soggy right next to each other? What is the difference between "efficiency" versus "uniformity" in irrigation systems? How do we manage all of this?

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**Managing Healthy Sports Fields**
Tom Samples, Ph.D., University of Tennessee
Paul Sachs, North County Organics

Many of today's new products and technologies can help sports turf managers maintain healthy, wear-resistant turf. Timely mowing, fertilization, watering, aeration and pest control are fundamental. Learn that the vast majority of soil organisms are beneficial in a functioning ecosystem.

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**Developing an Aeration Program for Sports Fields**
Trest Hale, Ph.D., Clemson University
Dale Getz, The Toro Company

Learn how aerification of both warm-season and cool-season turfgrasses are an essential part of a good sports field maintenance program. The primary benefit of core aerification is to alleviate soil compaction. However, there are many other benefits of a routine aerification program, including water infiltration, compaction relief, air exchange, seedbed preparation etc.

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April 2006 – Expires October 30, 2006 – RS0605
More bermuda in the outfield

BY DR. GRADY MILLER
Professor, University of Florida

Questions?
Send them to
Grady Miller at the
University of Florida,
106 Horticulture Hall.
Grady Miller at
PO Box 110670,
Ames, IA 50011
or email gmiller@ mail.ifas.ufl.edu.

Or, send your
question to
David Minner at
Iowa State University,
106 Horticulture Hall,
Ames, IA 50011
or email dminner@iastate.edu.

Q:
On my baseball outfield, I have lots of common
Bermuda, but would like more. I want to sow
some seed this spring, but I don’t want to plow it
up and upset what I already have and we also want to con-
tinue playing on it. Can I aerate it real good, do some hand
raking and sow the seed without plowing? Will I have any suc-
cess this way? If we do decide to start from scratch this sum-
mer, what is the best way to seed it so it grows in fast?
Thanks for your answer.

Florida

A: Thanks for the e-mail. I regularly get questions relating to
planting bermudagrass the way you have suggested. While
this is not the ideal way to establish bermudagrass, it can
be used to fill large bare areas. But I am not sure that it
would be overly beneficial to do this just to strengthen a
stand. In the southeast (especially Florida) with typical the
late spring and summer conditions, you can grow bermud-
grass pretty quickly. In fact, some people tell me that in
the summer, the time they finish mowing their fields
they need to start over it has grown so
much. Of course
our summer heat
and humidity may
contribute to this
phenomenon.

For weak turf
areas and bare areas less than
one foot in diam-
ter, I generally rec-
ommend the areas
be grown in via well-
timed additions of extra fertilizer and irrigation. The four
things bermudagrass likes most are light, heat, nitrogen fer-
tilizer, and water. Spot applications with a quarter to half
pound of soluble nitrogen per thousand square feet every
five to seven day for 2-3 weeks will really fill in the bermu-
dagrass turf. As it begins to fill cut back on the fertilization rate.

Seeding into an existing bermudagrass stand and then
trying to grow the grass from seed is a little counterpro-
ductive to effectively managing the existing bermudagrass.
The newly sown seed needs to be kept moist for
germination and early seedling growth. This requires fre-
quent light irrigation to prevent drying. The more mature
grass should be watered more deeply and infrequently. So
you are really managing two different stages of growth.
Water management for the germinating seeds and young
seedlings is much more critical than the mature turf. If
you err on the wet side and continue using the field,
added soil moisture may cause some problems with field
playability. I am not saying it cannot be done, but this will
require a lot of your attention.

If you go this route, my suggestion would be to cut the
turf as short as you can get away with at this time of year
(and your conditions), put the seed out first and then not
aerate too deeply. This may get more seed in contact with
ground, which can improve germination. Dragging with a
mat or rolling with a light weight roller afterwards also
helps firm the seedbed, remove imperfections and aid
germination. Keep the site reasonable moist. I think
these practices will give you some assurance of success.
And remember that bermudagrass likes nitrogen fertilizer
so when it does come up, apply some fertilizer on a regu-
lar basis to keep it spreading.

Now if you decide to go all out and start with a clean
seedbed, I also have some suggestions. After preparing
the seedbed, broadcast your seed with your spreader
using the seed suppliers’ recommended rate. I would
then suggest that you carefully rake the seed into the
soil using a leaf rake or three-wheeled sand rake. It
would be helpful if you can lightly topdress with soil simi-
lar to your soil profile but most managers do not do this
extra step. Lightly roll to improve seed-to-soil contact and
remove surface imperfections.

I would highly recommend you using some kind of
cover over the seed. Last year I had some experience with
an erosion control mat/fabric called Futerra (product
name mentioned as an example, not as an endorsement)
and was very impressed with the difference between cov-
ered or not covered germination and early growth of
bermudagrass from seed. There are a number of these
mats on the market so I would suggest you investigate
their feasibility. After last year, I am convinced they are a
worthwhile investment for establishing from seed. They
hold in more moisture that seems to increase germination
time and the cover helps keeps the seeds in place when
you get those summer thunderstorms. Good luck with
your field.
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