



FORCE
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NATURE

THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE from
National Organization Responding Against HUJE that seek to harm the Green Space Industry (NORAHG)



Positive Waves

Interesting and Innovative Ideas that should
be adopted by the Turf Maintenance Industry

Growing Greener Turf With Correct Mowing Height

July 2011

Audubon International

Media Release

Selected and adapted excerpts

Audubon International is a not-for-profit 501(c)(3) environmental education organization dedicated to providing people with the education and assistance they need to practice responsible management of land, water, wildlife, and other natural resources.



Interesting and Innovative Ideas that should be adopted by the Turf Maintenance Industry

The Sustainable Landscape IPM Working Group, of which Audubon International is a founding member, has started a pilot project to measure changes in public attitudes and practices towards sustainable lawn care.

The focus of the effort is on the adoption of a single lawn care practice —

CORRECT MOWING HEIGHT

For home lawns, 3-inches or the highest setting.

This is the single most critical practice that home-owners can do correctly to have a healthy lawn.

All lawn best management practices hinge on proper mowing.

Many university studies have shown that mowing at 3-inches prevents weed problems, puts less stress on the grass, contributes to a healthy root system, drought resistance, better resistance to insects and diseases, and helps prevent run-off of soil, fertilizers, chemicals, and pollutants.

This pilot project is a regional effort among participants from University of Maryland Extension, Cornell Cooperative Extension, Penn State Extension, Audubon International, large and small lawn care companies, and Smithsonian Institution.

The goal is to achieve widespread adoption of the 3-inch mowing height across the region.



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Why mow at 3-inches ?

According to The Lawn Institute —

<< Shortly mown grass wants to rapidly grow back what it has lost.

The grass will pull reserves from the roots to increase shoot growth.

This decreases rooting and increases the chance the lawn will show signs of drought or heat stress. >>

Mowing turf short stresses the grass and provides open areas for weeds to become established.

It is best to remove no more than one-third of the grass blade each time you mow.

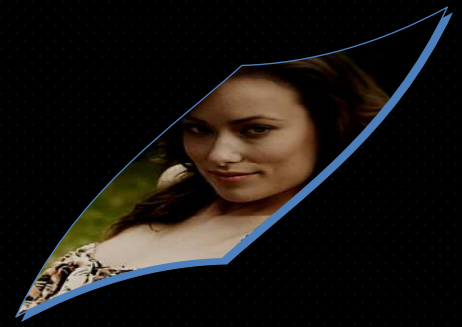
Mowing to the proper height can reduce weed problems by as much as 50 to 80 per cent.

Sharpen or replace mower blades at least once a year or more frequently if needed.

Leave grass clippings on the lawn — it is a way to recycle nutrients.

Background Information

from an Independent Perspective



Mowing Practices and Disease Suppression

The following practices of DISEASE SUPPRESSION are valid, but they WILL NOT provide disease CONTROL.

The intensity of disease activity MAY be reduced, but it is IMPROBABLE that disease will be fully controlled without some use of fungicides.

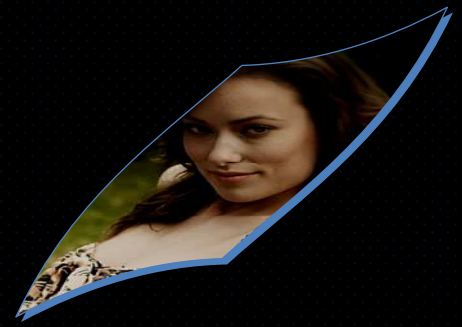
Applications of conventional fungicides will still be necessary, ESPECIALLY PREVENTIVELY, although their frequency may be significantly reduced.

The practices that are employed for DISEASE SUPPRESSION can be classified into issues concerning SEVEN broad categories —

- Mowing
- Fertilization
- Irrigation
- Mechanical intervention
- Soil management
- Vegetation management
- Other practices

Background Information

from an Independent Perspective



The following details will provide recommendations to the turf manager in the form of an action plan for minimizing the use of fungicides, especially on the golf course —

Mowing — General practices.

The implementation of the following mowing practices will influence the development of disease activity —

- Increasing the mowing height
- Mowing when conditions are dry
- Mowing until autumn growth has ceased

Mowing — Increasing the mowing height and the choice of equipment

INCREASING the mowing height will DECREASE TURF SUSCEPTIBILITY to certain diseases.

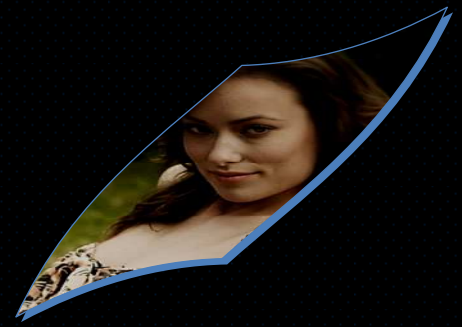
On putting greens with a history of chronic and lethal disease problems, maintain the mowing height to as high as $\frac{1}{4}$ -inch.

Preferably use a small WALK-BEHIND greens mower.

Use a SOLID roller instead of a grooved one.

Background Information

from an Independent Perspective



Mowing — Increasing the mowing height (continued)

INCREASING the mowing height and other mowing practices will DECREASE TURF SUSCEPTIBILITY to the following diseases —

- Anthracnose Foliar Blight
- Anthracnose Basal Rot
- Leaf Spot and Leaf Blight diseases, such as *Bipolaris*, *Curvularia*, and *Drechslera*
- Damping-Off (on seedlings)
- Dollar Spot
- Necrotic Ring Spot
- Summer Patch

Mowing — Clipping when conditions are dry

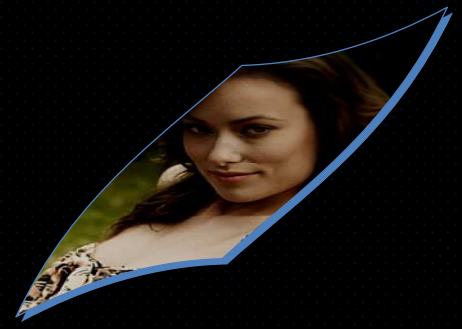
Avoiding to mow until leaves are COMPLETELY DRY later in the day will DECREASE the spreading of disease, or STREAKING.

Mowing when conditions are dry will DECREASE TURF SUSCEPTIBILITY to the following diseases —

- Brown Patch (minimal decrease)
- Dollar Spot
- Fusarium Patch (Microdochium Patch)
- Pythium Blight

Background Information

from an Independent Perspective



Mowing — Clipping until autumn growth has ceased

Keeping turf mowed properly all the way to the end of the autumn months will help offset the damage caused by Snow Mold diseases.

During the months of October and November, continuing to mow until foliar growth has ceased will DECREASE TURF SUSCEPTIBILITY to the following diseases —

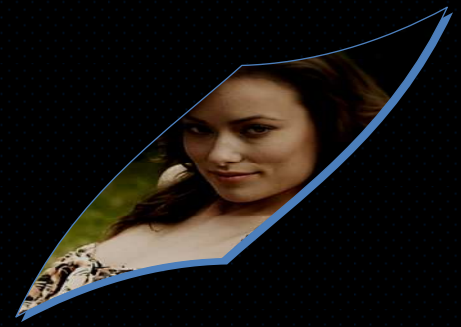
- Fusarium Patch (Microdochium Patch)
- Gray Snow Mold
- Pink Snow Mold

It should be noted that both Fusarium Patch and Pink Snow Mold diseases originate from the same organism.



Background Information

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Classification of Turfgrasses According to their Mowing Requirements

Turfgrass species	Preferred mowing height	Quality of mowing with leaves torn	Tolerates very short mowing	Preferred type of mowing unit
Annual bluegrass	Short — ½ to 1-in	Good	YES	Rotary
Annual ryegrass	High — 1 to 3-in	POOR-MODERATE	No	Rotary
Canada bluegrass	Very high — 3 to 4-in	Good	No	Rotary
Chewings fescue	Medium — 1 to 2-in	Good	YES	Rotary
Colonial bentgrass	Short — ½ to 1-in	Good	No	REEL
Creeping bentgrass	Very short — ⅛ to ½	Good	YES	REEL
Creeping bluegrass	Very short — ¼ to ½	Good	YES	REEL
Hard fescue	High — 1 to 3-in	Good	No	Rotary
Kentucky bluegrass	Medium-short — ½ to 2-in	Good	No	Rotary
Perennial ryegrass	Medium — 1 to 2-in	POOR	YES	Rotary
Red fescue	High — 1 to 3-in	Good	No	Rotary
Red top	Short-very short — ¼ to ¾-in	Good	YES	Rotary
Rough bluegrass	Short — ½ to 1-in	Good	No	Rotary
Sheep fescue	High — 1 to 3-in	MODERATE	No	Rotary
Tall fescue	High — 1 to 3-in	Good	No	Rotary

NORAHG

FORCE OF NATURE presents THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE from National Organization Responding Against HUJE that seek to harm the Green Space Industry (NORAHG).

It is a series of reports destined for the green space industry, the environmental terrorist movement, governments, and the media, nationwide across Canada, the United States, and overseas.

The information presented in FORCE OF NATURE has been developed for the education and entertainment of the reader by providing a sequence of historical events WITH COMMENTARY.

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FORCE OF NATURE, and its various incarnations, is the brainchild of William H. Gathercole and his colleagues.

Here is a brief summary of Mr. Gathercole's career —

Fields of study — Horticulture/Agriculture, Mathematics, Physics

Alma mater — McGill University • University of Guelph • the first person ever to obtain university degrees and contribute to both the professional lawn care and golf maintenance industries

Expertise in — environmental issues and environmental terrorism • turf and ornamental maintenance and troubleshooting • history of the industry • sales and distribution of seeds, chemicals, fertilizers, and equipment • fertilizer manufacturing

Notable activities — worked in virtually all aspects of the green space industry, including golf, professional lawn care, distribution, environmental compliance, government negotiations, public affairs, and workplace safety • supervisor, consultant, and, programmer for the successful execution of hundreds of thousands of management operations in the golf and urban landscape, as well as millions of pest control applications • advisor, instructor, and trainer for thousands of turf and ornamental managers and technicians • pesticide certification instructor for thousands of industry workers • founder of the modern professional lawn care industry • prolific writer for industry publications and e-newsletters • first to confirm the invasion of European Chafer insect in both the Montreal region and the Vancouver/Fraser Valley region • with Dr. Peter Dernoeden, confirmed the presence of Take-All Patch as a disease of turf in Eastern Canada • with Dr. David Shetlar, confirmed the presence of Kentucky Bluegrass Scale as an insect pest in South-Western Ontario, and later, in the Montreal and Vancouver regions

Special contributions — creator of the exception status that has allowed the golf industry to avoid being subjected to the prohibition of pest control products • creator of the signs that are now used for posting after application • co-founder of annual winter convention for Quebec golf course superintendents • the major influence in the decision by Canadian Cancer Society to stop selling for profit pesticide treated daffodils • the only true reliable witness who intervened in the development of prohibition in the town of Hudson, Quebec • retired founder of FORCE OF NATURE and A LOOK AT e-newsletters

Notable award — man of the year for contributions leading to the successful founding of Quebec professional lawn care industry, which served as a beach-head against activism in the 1980s and 1990s

Legacy — Mr. Gathercole and his colleagues ... designed and implemented strategies that reined environmental activists to provide peace for the entire modern green space industry across Canada • orchestrated legal action against activists in the town of Hudson, Quebec • launched the largest early professional lawn care business in Canada • quadrupled the business revenues of one of the largest suppliers in Canada

Mr. Gathercole is now retired, although his name continues to appear as founder of FORCE OF NATURE and A LOOK AT e-newsletters.

The Force Of Nature Library of Reports contains all FON Reports, as well as PESTICIDE TRUTHS and OTHER FACTS with Audios, History, Links, News, and Videos.

It is a LINK DATABASE created to support efforts to fight and exterminate the Environmental-Lunatic-Vermin with reports developed for the education and entertainment of the reader.

The Force Of Nature Library of Reports — A LOOK AT Career Management, Creeping Bentgrass, Golf Course Maintenance, Green Alternatives, Kentucky Bluegrass, Summer Stress, Turf Diseases, Insects & Weeds • Agriculture • ALBERTA Conspiracy • Bee Colony Collapse Disorder • Bee Colony Collapse Disorder • Benefits of the Turfgrass Industry • Beyond Pesticides • Books That Screwed Up the World • BRITISH COLUMBIA Conspiracy • Canadian Cancer Society • Canadian Association of Physicians for the Environment • CARNAGE and Consequences of Lunatic Terrorist Prohibition • Controversial Prohibitions • Culprits of the Prohibition Conspiracy • Daffodils, Toxic Pesticide Treated Flowers Soaked Formaldehyde • Dating Services for Enviro Maniacs • David Suzuki Foundation • DDT and Our World of Politicized Science • Death and Illness (Alleged) • Departure Letters • Ecojustice Canada • Energy Sector • Environmental Terrorists UNMASKED • Environmental Terrorist Organizations • Enviro PROFIT • Environmental Defence • FAILURE of IPM, Pesticide Manufacturers, Prohibition, Trade Associations • Famous Quotations About Enviro Lunatics • Fertilizer TERROR • Food and Farming • Get Off Our grASS • Global Warming, The Scam of Our Lifetime • Golf Industry • Green Alternatives • Green Party • Halloween Terror • Happy Holidays • Health Canada • Health Concerns with Pest Control Products • Heroes Speaking Out Against Environmental Terror • History of Environmental Terror in Canada • History of the Turfgrass Industry • LIARS and Lying Sacks of (Enviro Maniac) Cwap • Mock Advertisements • Mock Speeches • Myth BUSTING • NATIONAL Prohibition • NEW BRUNSWICK Conspiracy • NO Prohibition Exception for AGRICULTURE Industry • NO Prohibition Exception for GOLF Industry • NOVA SCOTIA Conspiracy • North America Free Trade Agreement (NAFTA) • ONTARIO Conspiracy, Haven For Environmental Terrorists • Ontario College of Family Physicians • Organic Golf Courses • Organic Maintenance • Organizations of the Prohibition Conspiracy • Pesticide Q & A (Questions and Answers) • Positive Waves (Interesting and Innovative Thinking) • PRINCE EDWARD ISLAND (PEI) Conspiracy • QUEBEC Prohibition • Quotations About Enviro Lunatics & Maniacs • Rachel Carson, The Queen of Junk Science • SASKATCHEWAN Conspiracy • Satire, Laughs & Insanity • Terror That NEVER Ends • TERROR Talk and Weasel Words • THE AVENGERS • The Environmental Factor • The FAILURES of Green Alternatives, Organic Golf Courses, BROWN Golf Courses, Integrated Pest Management, Pesticide Free Parks. and Pesticide Manufacturers • The Industry STRIKES Back • The Wilhelm Scream • The Wisdom of REAL Experts • Tukey TERRORISM • TWISTED Precautionary Principle • United States Enviro TERRORISM • UPDATES • VICTORIES Against Terrorists • Video, Audio, and Slide Shows • VIOLATING Federal Law • VIOLATING Prohibition • WARNINGS • Weapons of Ultimate Environmental Terror • Wind Power (Bogus) • 2,4-

*Thicker, greener, and pest-free turf
may need higher mowing height*

