A Look At ...

A LOOK AT ... FROM AN INDEPENDENT PERSPECTIVE from
National Organization Responding Against HUJE that seek to harm the Green Space Industry (NORAHG)

Dandelion

A Look At Turfgrass Weed Management

Dow AgroSciences and other

Selected and adapted excerpts

Distribution

Dandelion is native to Eurasia and North America, and is found as a weed species throughout the world.

Names Associated with Dandelion

DANDELION, Common Dandelion, Blow–Ball, Cankerwort, or Lions–Tooth (English names).

Taraxacum officinale F.H. Wigg (Latin name).

Pissenlit (French name).

The 5 to 25 centimetres (2 to 10–inches) long leaves have DEEP INDENTIONS that inspired the plant's name of Dandelion, « *dent-de-lion* » which means « *the tooth of the lion* ».

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Distribution

Dandelion is native to Eurasia and North America, and is found as a weed world–wide.

Likely Locations

Golf course putting greens, tees, fairways, and rough

Parks and playgrounds

Residential home and commercial lawns

Roadsides

Sports fields

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Danger

In turf, Dandelion will FORM DANGEROUS CLUMPS that cause POOR FOOTING and INJURIES on playing surfaces such as sports fields and golf courses.

Moreover, the roots of Dandelion will attract gophers, which are vermin that burrow DANGEROUS HOLES in the ground.

Damage

When Dandelion infest turfgrass areas, they FORM DENSE CIRCULAR MATS of leaves, 15 to 36 centimetres, or 6 to 14–inches in diameter, that REDUCE THE VIGOUR of surrounding turf, and CROWD OUT desirable turfgrass species.

The presence of a Dandelion infestation will DISRUPT the playing surfaces sports fields and golf courses, and hence, ZERO–TOLERANCE WEED CONTROL PROGRAMS MUST BE INITIATED.

Furthermore, the AIR–BORNE PAPPUS on the Dandelion seed, a parachute–like structure, FREQUENTLY CLOGS UP MAINTENANCE VEHICLE RADIATORS.

PAPPUS allows Dandelion seed to be transported via wind currents for long distances.

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Identification

Dandelion is best known for its YELLOW FLOWER HEADS that turn into ROUND BALLS OF SILVER–TUFTED FRUITS THAT BLOW AWAY ON THE WIND.

Summary of identification features of Dandelion —

- Broad–leaved perennial herbaceous plant
- Flowers or blossoms are bright yellow and large with many petals, followed by puff–ball seed carriers — each single flower in a head is called a floret — the flower heads are 2 to 5 centimetres (¾ to 2–inches) in diameter
- Leaves are hairless, long, jagged, and thick with teeth pointing towards the center — 5 to 25 centimetres (2 to 10–inches) long
- Reproduction by seed only, although recovery from winter damage occurs with the tap–root
- Rosette with low growth habit — the rosette may produce several flowering stems at a time
- Stems are hollow and leafless, 1 to 10 centimetres (⅓ to 4–inches) high, and emit a white milky sap, or latex, when broken

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Seed Dispersal

Dandelion has seed that RAPIDLY COLONIZE DISTURBED SOIL.

After the flowering stage, the Dandelion flower head dries out for a day or two.

The dried petals and stamens drop off, the bracts reflex (i.e. curve backwards), and the parachute ball opens into a full sphere.

Dandelion develops a parachute–like structure, PAPPUS, allowing its seed to be transported via wind currents for miles.

The seed–bearing parachute expands, and lifts out of it.

The parachute drops off the one–seeded fruit, ACHENE, when it strikes an obstacle.

After the seed is released, the parachutes lose their feathered structure and take on a fuzzy, cotton–like appearance, often called « *dandelion snow* ».

Because Dandelion seed can be wind–borne for very long distances, prevention of new infestations is VIRTUALLY IMPOSSIBLE.

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Life Cycle

In general, Dandelion will easily survives harsh cold winters, and leaves and stems will emerge in the spring from un–branched tap–roots.

Dandelion produces one to more than ten flower stems per year.

Seed germination occurs at or very near the soil surface, and is optimized by the presence of light.

The seed germinates when soil is moist and soil temperature is at least 10 degrees Celsius, or 50 degrees Fahrenheit; however, germination is more rapid when the soil temperatures are closer to 25 degrees Celsius, or 77 degrees Fahrenheit.

Seed germination will occur throughout the growing season.

The seedling stage can last 8 to 15 weeks, depending upon temperature and growing conditions.

Seedling growth is slower in cold weather.

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Threshold

Since the presence of a Dandelion infestation will DISRUPT the playing surfaces of sports fields and golf courses, ZERO TOLERANCE WEED CONTROL PROGRAMS MUST BE INITIATED.

Unfortunately, turf managers tend to use THRESHOLDS determined by PER CENT WEED COVER, in order to justify chemical weed control practices.

This is UNACCEPTABLE for a playing surface.

For example, on a standard football field, which is 54,000 square feet, if just ONE PER CENT of the playing surface is covered in Dandelions, there are OVER THREE THOUSAND DANDELION PLANTS INFESTING THE FIELD.

Not only does the presence of a Dandelion infestation DISRUPT the playing surface, DANGEROUS CLUMPS of Dandelion will cause POOR FOOTING and INJURIES, especially for children

Conditions Favouring Weed Development

Dandelion thrives in weak, thin turf.

Thick, healthy turf is important for managing this weed species.

Properly mow, water and fertilize lawn to encourage healthy growth and minimize thin turf.

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Cultural Practices

The prevailing maintenance practices may PARTLY SUPPRESS, and NOT CONTROL, the development of Dandelion.

Examples —

- Apply adequate fertilization
- Implement insect and disease control practices
- Maintain a dense, healthy, vigorous turf
- Perform proper mowing and irrigation practices
- Use of adapted turfgrass species

Low nitrogen fertilization will encourage weeds due to less competition from desirable turfgrass species.

Mowing as soon as the first flower–heads appear MAY REDUCE further infestations.

Manual Weed Pull

Because of its EXTENSIVE ROOT SYSTEM, hand–pulling or hoeing to remove Dandelion is ALMOST TOTALLY FUTILE unless performed repeatedly over a very long period of time.

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Effective Chemical Control

A conventional POST–EMERGENT application of two–, or three–way broad–leaved herbicides are most effective in spring or fall.

Most of these herbicides contain the active ingredient 2,4–D.

A single application may VIRTUALLY CONTROL ALL DANDELION FOR MONTHS.

For three–way herbicides like Killex Turf Herbicide, the product label recommends that TWO APPLICATIONS PER YEAR per treatment site are necessary for adequate weed CONTROL — this does not include spot–treatments, which are also permitted on the label.

PRE–EMERGENT herbicides that are commonly used to control crabgrass in turf have NOT been successful in limiting the germination of Dandelion.

Quebec Prohibition of Effective Chemical Control of Dandelion

On April 3rd, 2004, the Government of the Province of Quebec proceeded with the FIRST STAGE of its NEEDLESS, SENSELESS, and MALICIOUS PROHIBITION of 20 active ingredients used by the Professional Lawn Care Industry and Do-It-Yourself Homeowners.

Quebec PROHIBITION included 2,4-D, Weed and Feed Products, and more.

Quebec PROHIBITED pest control products, like 2,4-D, on the PRETEXT that they were POSSIBLY carcinogenic, which has now been DEEMED AS FALSE.

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Invalidation of Quebec Prohibition

On May 25th, 2011, Dow AgroSciences, the manufacturer of the pest control product 2,4–D, SETTLED THE NAFTA CHALLENGE CASE with the Canadian government.

The North American Free Trade Agreement, or NAFTA, is an agreement signed by the governments of Canada, Mexico, and the United States, creating a tri–lateral trade block in North America.

As part of agreement, a VICTORY for the company, the GOVERNMENT OF QUEBEC was HUMILIATED into making a STATEMENT saying that …

2,4–D DOES NOT POSE AN UNACCEPTABLE RISK
to human health or the environment.

Ontario Prohibition of Effective Chemical Control of Dandelion

On April 22nd, 2009, the Government of Ontario IMPOSED the NEEDLESS, SENSELESS, and MALICIOUS PROHIBITION against pest control products used by the Modern Professional Lawn Care Industry.

Again, Ontario PROHIBITION included 2,4-D, and many more products.

The legislation was implemented despite the fact that the PROHIBITED pest control products were still HEALTH–CANADA–APPROVED, FEDERALLY–LEGAL, SCIENTIFICALLY–SAFE, and TOTALLY–IRREPLACEABLE.

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Because of this LUNATIC–TERRORIST–PROHIBITION, the DEVASTATION of the Professional Lawn Care Industry was EXTENSIVE because there were NO VALID ECONOMICAL ALTERNATIVES TO REPLACE THE PROHIBITED PRODUCTS … including products like Fiesta and Sarritor.

When compared to conventional products like 2,4–D, VIRTUALLY ALL Green Alternatives were found to be BOGUS and almost TOTALLY INEFFECTIVE against weeds like Dandelion.

LUNATIC–TERRORIST–PROHIBITION has led to LOSS OF REVENUES, BUSINESS FAILURES, BANKRUPTCY, and UNEMPLOYMENT.

Because of LUNATIC–TERRORIST–PROHIBITION in Ontario, the PROFESSIONAL LAWN CARE INDUSTRY LOST OVER 500,000,000 DOLLARS, with 8,300 TO 12,500 UNEMPLOYED.

40 TO 70 PER CENT of Professional Lawn Care customers were ANNIHILATED, depending upon the type of company and its location.

It is expected that, just as in the Province of Quebec three years earlier, OVER 60 PER CENT of the Ontario Lawn Care companies will be TOTALLY ANNIHILATED.

Because of LUNATIC–TERRORIST–PROHIBITION, the owners, employees, and families dependent on Professional Lawn Care companies FACE TERROR, DESPAIR, and DESTITUTION.

In Ontario, ONE–COMPANY–PER–WEEK DISAPPEARS INTO TOTAL OBLIVION.

Companies CONTINUE TO DISAPPEAR because there are NO VALID ECONOMICAL GREEN ALTERNATIVES to control weeds like Dandelion.

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Green Alternatives

Despite claims to the contrary, overall, there are NO viable, efficacious, or economical Green Alternatives to replace conventional pest control products.

Green Alternatives will MERELY SUPPRESS broad–leaved weeds like Dandelion, but WILL NEVER PROVIDE THE SAME EFFECTIVE CONTROL PROVIDED BY CONVENTIONAL PRODUCTS like 2,4–D.

Virtually all Green Alternatives are BOGUS.

Recent examples include Fiesta and Sarritor.

Dandelion Suppression with Fiesta Herbicide

Fiesta is a so–called Green Alternative to three–way phenoxy turf herbicides, such as Killex, that contain the active ingredient 2,4–D.

With Fiesta, Dandelion RE–GROWTH will quickly occur.

Essentially, Fiesta provides VERY–SHORT–TERM FIVE–DAY WEED SUPPRESSION.

Adequate Dandelion control with Fiesta is only achieved with an EXHORBITANT 6 TO 8 APPLICATIONS PER SEASON.

However, the label allows a maximum LIMIT of two applications per season.

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Fiesta REQUIRES EXTREMELY–HIGH–INPUTS OF ACTIVE INGREDIENT (a.i.) when compared to conventional pest control products.

The exceedingly high a.i. rate of Fiesta seems to fly in the face of the desired environmentalist objective of reducing the amount of active ingredient being applied in pest control product programs.

Moreover, Fiesta is stunningly more expensive than conventional pest control products.

Finally, according to Health Canada, the signal words for Fiesta are « *potential skin sensitizer* » and « *may cause skin sensitization* ».

By comparison, Killex may cause severe irritation to the eyes, and irritation to the skin and mucous membranes.

For Dandelion control, Green Alternatives like Fiesta are DISMAL FAILURES.

Dandelion Suppression with Sarritor Herbicide

Sarritor is a so–called Green Alternative to three–way phenoxy turf herbicides, such as Killex, that contain the active ingredient 2,4–D.

Sarritor essentially acts like a very selective and post–emergent herbicide that MERELY SUPPRESSES Dandelion.

Unlike conventional herbicides, Sarritor WILL NEVER CONTROL THE ENTIRE DANDELION PLANT, and RE–GROWTH will quickly occur.

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According to Health Canada, Sarritor caused significant health effects in laboratory animals when a large dose was applied to the respiratory tract.

Consequently, the precautionary wording « *DO NOT BREATHE DUST* » is required on the product labels.

Furthermore, commercial as well as domestic applicators are required to wear respiratory protection suitable for preventing inhalation of biological products.

This type of protection is not needed for applying conventional pest control products like Killex.

For Dandelion control, Green Alternatives like Sarritor are DISMAL FAILURES.

Green Alternative Research

The University of Guelph, through the Guelph Turfgrass Institute, operates with Government–Officials who are ABUSING RESEARCH to PERPETUATE THE MYTH that Green Alternatives are a SUCCESS.

At Guelph Turfgrass Institute, Government–Officials are mostly consultants and researchers who are DIRECTLY INVOLVED and PROFITING from these BOGUS Green Alternatives, through RESEARCH GRANTS, and JOB SECURITY with PENSION PLANS.

Since the implementation of Ontario PROHIBITION, the University of Guelph has become the INSTRUMENT of ENVIRO–LUNATIC–PROPAGANGA for the Government of Ontario.

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Guelph Government–Officials are ultimately ANSWERABLE to their PROHIBITION–LUNATIC–MASTERS in the Government of Ontario, and they are expected to SUPPORT SOCIAL POLICIES such as PROHIBITION.

ALL Government–Officials employed at the University of Guelph have been told to « *toe the line* ».

ALL Government–Officials MUST SUPPORT LUNATIC–TERRORIST–PROHIBITION, or FACE TERMINATION from employment and SUFFER THE LOSS OF THEIR LUCRATIVE GOVERNMENT POSITIONS and PENSION PLANS.

Consequently, Guelph Government–Officials have been COERCED and TERRORIZED into PROMOTING MIS–INFORMATION about the so–called SUCCESS of PROHIBITION, and the ALLEGED EFFECTIVENESS of Green Alternatives that are, in fact, BOGUS.

Moreover, Guelph Government–Officials have been grabbing Ontario tax–payer money and spending it on BOGUS UNIVERSITY STUDIES that result in ZERO BENEFITS for the Professional Lawn Care Industry.

Overall, Guelph Government–Officials will say ANYTHING TO ADVANCE the SALE–FOR–PROFIT of BOGUS Green Alternatives, and TO VALIDATE LUNATIC–TERRORIST–PROHIBITION.

In fact, there ARE NO VALID ECONOMICAL ALTERNATIVES TO REPLACE THE PROHIBITED CONVENTIONAL PRODUCTS … including products like Fiesta and Sarritor.

Overall, the opinions originating from Guelph Government–Officials within Guelph Turfgrass Institute are VALUELESS and WORTHLESS in matters concerning BOGUS Green Alternatives.

The bottom line … wherever PROHIBITION is IMPOSED, there are NO viable, efficacious, or economical Green Alternatives to manage weeds like Dandelion.

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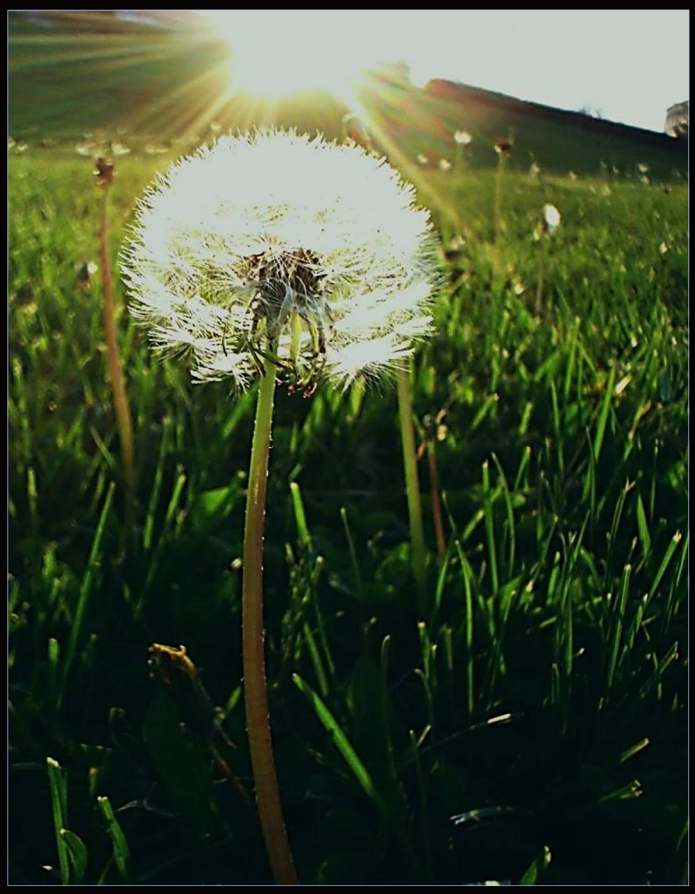

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A LOOK AT is a Report presented by National Organization Responding Against Huje that seek to harm or misinform the Green Space Industry (NORAHG). It is a series of Reports destined for the Green Space Industry, nationwide across Canada, the United States, and overseas. This Report has been developed for the education and entertainment of the reader by providing TECHNICAL INFORMATION WITH COMMENTARY.

A LOOK AT is TOTALLY INDEPENDENT of any trade association or business operating within the Green Space Industry. Don't thank us. It's a public service. And we are glad to do it.

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The information presented in this Report is for preliminary planning only. Before making a final decision, the turf manager is expected to obtain trusted expert advice from extension specialists, local distributors and/or agronomists. All decisions must take into account the prevailing growing conditions, the time of year, and the established management practices.

All products mentioned in this Report should be used in accordance with the manufacturer's directions, and according to provincial, state, or federal law. For the official advantages, benefits, features, precautions, and restrictions concerning any product, the turf manager must rely only on the information furnished by the manufacturer. The mention of trade names does not constitute a guarantee or a warranty.

A LOOK AT, and its various incarnations, is the brainchild of William H. Gathercole and his entourage. Mr. Gathercole is a principal founder of the Modern Professional Lawn Care Industry in both Ontario and Quebec. He holds a degree in Horticulture from the University of Guelph, and another pure and applied science degree from McGill University. Mr. Gathercole was the FIRST PERSON EVER to obtain University degrees and contribute to BOTH the Professional Lawn Care and Golf Maintenance Industries. He has worked in virtually all aspects of the Green Space Industry, including golf, professional lawn care, and distribution. Mr. Gathercole has supervised, consulted, programmed, and/or overseen the successful execution of hundreds of thousands of management operations in the urban landscape. He has advised, certified, instructed, and trained thousands of turf and ornamental managers and technicians. Mr. Gathercole has also been an agricultural agronomist. Mr. Gathercole is personally credited for crafting the Exception Status that has allowed the Golf Industry to avoid being subjected to the lunatic–terrorist–prohibition of pest control products. He is also the creator of the signs that are now used for posting after application. Mr. Gathercole is now retired, although his name continues to appear as the founder of A LOOK AT.