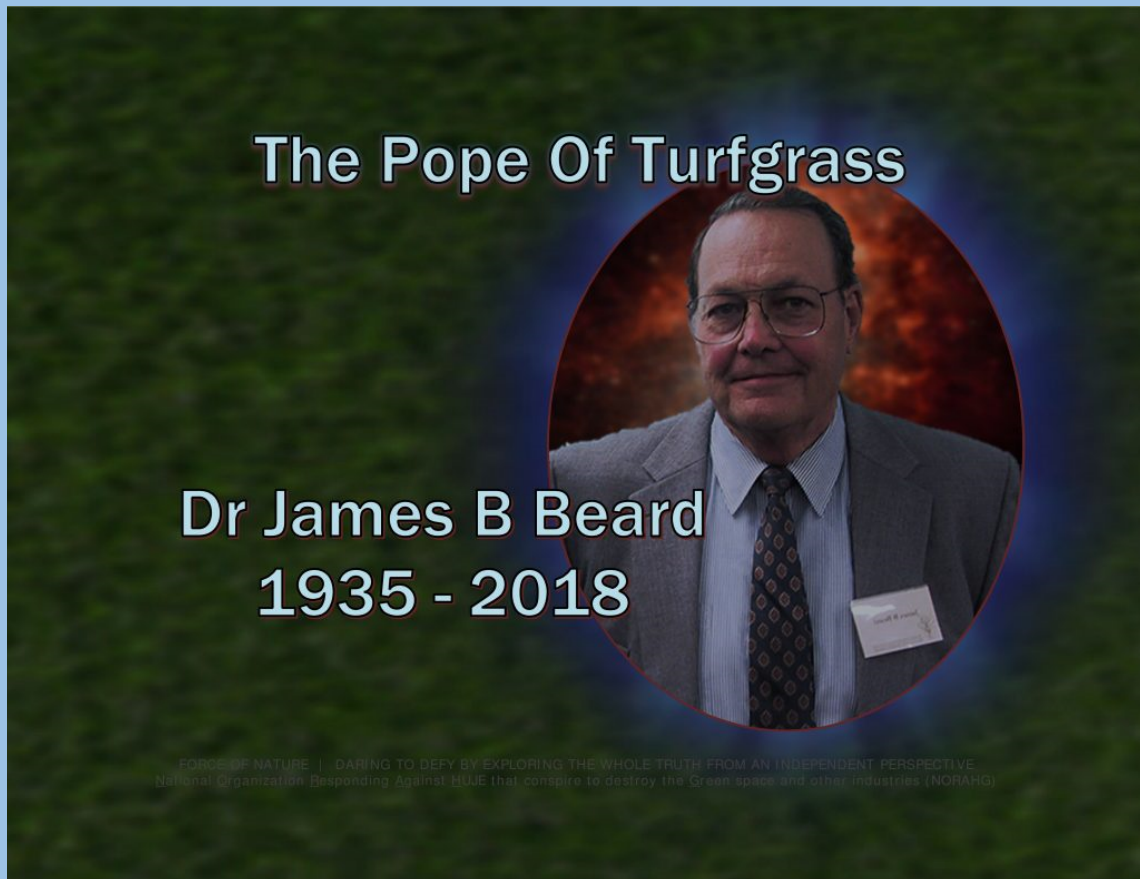


Pesticide Truths

Dr James B Beard – 1935 – 2018 – Hero & Legendary Icon Of The Green Space Industry

May 24, 2018 [WILLIAM H GATHERCOLE AND NORAH G](#) [Leave a comment](#)



Summary

Dr James B Beard — 1935 – 2018

Dr Beard was a legendary icon, hero of the green space industry, and tireless worker dedicated to the advancement of turfgrass science.

He touched the professional lives of tens of thousands turfgrass managers, researchers, and educators throughout the world.

Dr Beard meticulously researched books and publications that served as priceless information for the turfgrass industry.

His books became « *bibles* » for generations of turf maintenance professionals.

He was the author of best-selling « *bibles* » like « *Turfgrass : Science and Culture* » and « *Turf Management for Golf Courses* ».

His personal library, known as The Beard Collection, has been generally acknowledged to be the finest compilation of turf-related material in existence.

The Beard Collection is now archived at Michigan State University with a recognition as the strongest public repository of turfgrass literature in the world.

Dr Beard was one of the truly great pioneers of turfgrass management and a legendary icon in the turfgrass industry.

Thank you, Dr Beard.

Dr James B Beard 1935 - 2018

One Of The Truly Great Pioneers Of Turfgrass Management

FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against HWE that conspire to destroy the Green space and other industries (NORAHQ)

Explore the following link ...

**The Media Library About More
Heroes Of The Green Space Industry**

<http://pesticidetruths.com/toc/heroes/>



May 18th, 2018

Bridges Stocker Fraley Funeral Home

Selected And Adapted Excerpts

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Bridges-Stocker-Funeral-Home.pdf>

Dr Beard Was A Legend In The Turfgrass Industry

Dr James B Beard passed away on May 14, 2018 in Bryan, Texas, at the age of 82.

Dr Beard was born on September 24, 1935 in Piqua, Ohio, to James Hart and Margaret Bashore Beard and grew up on the family farm near Bradford, Ohio.

He graduated from The Ohio State University in 1957 with a Bachelor of Science in Agronomy.

He married the love of his life, Harriet Jean Coon, in 1955.

James and wife Harriet, then decided to continue his education with a Master of Science in Crop Ecology and a PhD in Turfgrass Physiology from Purdue University.

Dr Beard spent most of his career in the field of Soil and Crop Sciences where he was known as a LEGEND.

He blazed trails of critical research that would later develop into new fields of study.

From the start of his career as a professor, first at Michigan State University and later at Texas A&M University, he touched the lives of every student that passed through his classes.

His love of crop sciences can still be seen in his students today.

From the start of his career in 1953, his research set new standards in the world of Soil and Crop Sciences where he received numerous distinguished awards including —

- American Library Association Oberly Award which he received twice.
- Distinguished Alumni Award from The Ohio State University.
- Honorary Doctorate of Agriculture *honoris causa* from Purdue University.

- James B Beard Turfgrass Collection dedicated at Michigan State University Library.
- Veitch Honour Medal of the Royal Horticultural Society.

... plus numerous other industry awards.

Dr Beard authored 9 published books, dozens of manuals, and hundreds of technical articles and research papers.

Dr Beard also sat on the Board of Directors of The Scotts Company and many other National Committees.

Jim, as his friends and family knew him, loved to travel the world with his family.

But his favorite place was the lakehouse on Lake Leelanau, Michigan.

His favorite part of summers on the lake were fishing and exploring Michigan with his family.

Jim was survived by his wife, Harriet; sons, James C Beard of College Station, Texas and John Beard of Dallas, Texas; granddaughter, Amanda and husband Rusty Harrison of Waco, Texas; sister, Shirley Crotcher of Versailles, Ohio; nieces, Kim and husband Milian Pozderac of Mount Vernon, Ohio, Kelly and husband Travis Fliehm of Greenville, Ohio, Kristi and husband John Kaiser of Versailles, Ohio.

Jim was preceded in death by his parents, and his sister, Peggy Beard.

A grave side service was scheduled for 2:00 pm on May 21st, 2018, at Greenville Creek United Church of Christ Cemetery near Bradford, Ohio.

All were welcome to attend and celebrate Jim's life.

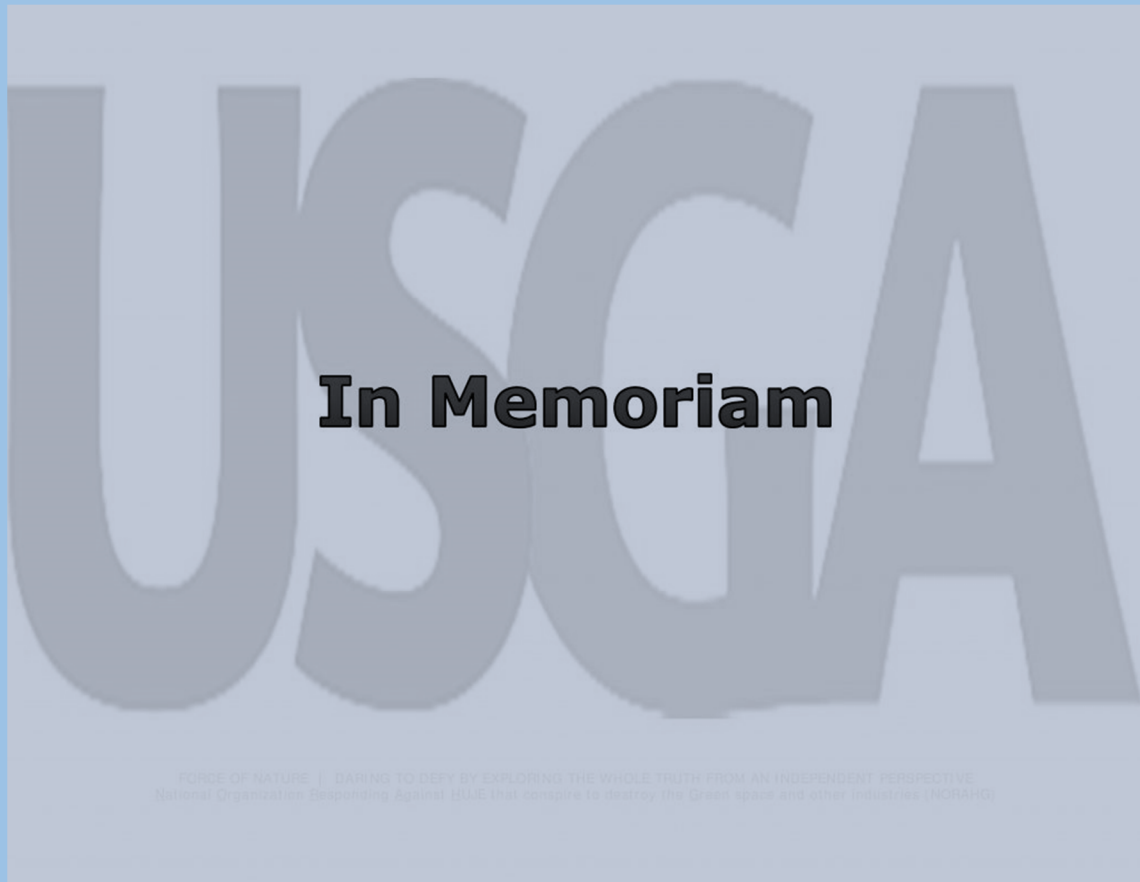
In lieu of flowers, please send donations to The American Heart Association.

Dr James B Beard 1935 - 2018

A Legendary Icon In The Turfgrass Industry

FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against HUE that conspire to destroy the Green space and other industries (NORAHQ)





May 18th, 2018

USGA Green Section Record

Selected And Adapted Excerpts

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-In-Memoriam-Dr-James-B-Beard-USGA.pdf>

A Leading Icon & Tireless Worker Dedicated To The Advancement Of Turfgrass Science Resulting In Meticulously Researched Books & Publications That Served As Documentation For The Turfgrass Industry

The turfgrass industry lost one of its LEADING ICONS on May 14th, 2018.

Dr James B Beard was a tireless worker dedicated to the advancement of turfgrass science, whether focused on research, academics, or extension.

Dr Beard's contributions in the United States and globally are significantly too many to list in one place.

His quest for finding the next answers resulted in meticulously researched books and publications that documented the turfgrass industry.

In the golf arena, Dr Beard played an important role in the United States Golf Association [[USGA](#)] Green Section history.

In the early 1980s, he strongly lobbied the USGA Executive Committee on the critical importance of financially supporting research work through the USGA Turfgrass and Environmental Research Program.

Dr Beard initiated many of the turfgrass drought and physiology studies that helped make progress toward golf course water conservation.

His collaborative work with the Green Section staff resulted in two editions of the highly respected book « *Turfgrass Management for Golf Courses* ».

Dr Beard was the 1989 recipient of the USGA Green Section Award, but the volume of his contributions to turfgrass science continued until his death.

You would be hard pressed to find any person working in the turfgrass industry who does not have some connection to, or who has not benefited from, the decades of work by Dr Beard.

**Dr Beard's Contributions To Our Understanding Of
Turfgrass Science Have Touched The Professional
Lives Of Turfgrass Managers, Researchers, &
Educators Throughout The World**

Dr James B Beard 1935 - 2018

**Meticulous Researcher Of
Books And Publications
That Served As Priceless
Information For The
Turfgrass Industry**

FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against HUE that conspire to destroy the Green space and other industries (NORAHQ)

Tribute By Sports Turf Research Institute

STRI

FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against BLUE that conspire to destroy the Green space and other industries (NORAHQ)

May 18th, 2018

Dr Richard Gibbs

Head Of Sports Surface Design

Sports Turf Research Institute (STRI)

Historian At International Turfgrass Society (ITS)

Selected And Adapted Excerpts

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Tribute-To-Dr-James-B-Beard-STRI.pdf>

One Of The True Pioneers Of Turfgrass Management

Dr Richard Gibbs, who knew Dr Beard well, shares his thoughts.

I was slightly stunned to hear that Dr James B Beard passed away on 14th May, aged 82.

Dr Beard was a hugely influential figure in the international turfgrass industry, a true research pioneer who is widely credited with turning turfgrass management into a science.

Brought up in Bradford, Ohio, Dr Beard graduated with a bachelor's degree in agronomy from Ohio State University in 1957 and then studied for his masters in crop ecology and doctorate in turfgrass physiology at Purdue.

Dr Beard developed the Michigan State program into one of the USA's top turf colleges and then spent almost 20 years working at College Station at Texas A&M University.

There, he founded the International Sports Turf Institute and served as its director and chief scientist.

Dr Beard Was The Author Of Turfgrass « *Bibles* » Like « *Turfgrass : Science & Culture* » & « *Turf Management For Golf Courses* »

Dr Beard is perhaps BEST KNOWN in the United Kingdom as THE AUTHOR OF MANY TURFGRASS « *BIBLES* » including « *Turfgrass : Science and Culture* » and « *Turf Management for Golf Courses* ».

Perhaps less well known to the turfgrass industry here is that Dr Beard was one of the founding members of the International Turfgrass Society (the ITS) which held its first International Turfgrass Research Conference in Harrogate in 1969, assisted by former STRI Director John Escritt.

This conference was the culmination of three years of work to develop enhanced communication among international turfgrass scientists.

The ITS is still going strong today.

The most recent meeting was held in 2017 at Rutgers, USA, the last to be attended by Dr Beard.

He remained the Society's official historian until 2007, a role which I have now taken over.

However, I first met Dr Beard at the 6th International Turfgrass Research Conference in 1989 in Tokyo as a young research scientist.

It was a very formal meeting — I had been invited to chair one of the sessions he was presenting at — nothing like being dropped in at the deep end !

But like many true professionals he guided me through the session and I have remained involved with the ITS ever since.

He will be sadly missed by the turfgrass industry.

Dr James B Beard 1935 - 2018

Dr Beard was the author of
turfgrass « *bibles* » like « *Turf
Management For Golf Courses* »



FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against HWE that conspire to destroy the Green space and other industries (NORAHG)





May 15th, 2018

Golf Course Management Magazine

Golf Course Superintendents Association (GCSAA)

Selected And Adapted Excerpts

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Golf-Industry-Mourns-James-B-Beard-PhD-GCM.pdf>

The Scientist & Legend Known As The Pope Of Turfgrass

The students of Dr James B. Beard, PhD, had a name for him.

According to Johnny Walker, GCSAA South Central field staff representative —

We used to call him The Pope Of Turfgrass.

His mind was always working on the next research project and was so interested in what made the plant work.

Dr Beard is considered a pioneer in turfgrass science, and spent much of his career at universities, including Michigan State and Texas A&M, which is where Walker studied under him.

A native of Bradford, Ohio, Dr Beard authored numerous works, including the famed « *Turfgrass : Science and Culture* » in 1973, « *Turf Management for Golf Courses* », and 2004's « *Beard's Turfgrass Encyclopedia for Golf Courses, Grounds, Lawns, Sports Fields* ».

Dr Beard, who wrote hundreds of peer-reviewed papers and technical papers, donated his collection of turfgrass research materials in 2003 to the Turfgrass Information Center at Michigan State, where he taught from 1961 to 1975.

The Godfather Of Turfgrass Science

According to Kevin Frank, PhD, associate professor at Michigan State —

He is the grandfather — the godfather — of turfgrass science.

I don't think anybody would argue with that.

What stands out was his leadership in making turfgrass a science.

The recipient of GCSAA's Distinguished Service Award in 1993, Dr Beard earned his Bachelor's Degree in Agronomy from Ohio State University and, later, both his Master's in Crop Ecology and Doctorate in Turfgrass Physiology from Purdue University.

Dr Beard founded the International Sports Turf Institute, headquartered in College Station, Texas, and had been Professor Emeritus of Turfgrass at Texas A&M since 1993.

According to Dr Paul Rieke, PhD, an authority on turfgrass soil and nutrition in his own right, and a colleague of Dr Beard's at Michigan State —

He was focused, congenial, respectful.

He was a visionary when it came to building a strong research program across the board.

He was a very precise scientist.

He clearly challenged the status quo.

Dr Joe Vargas, PhD, was a colleague and long-time friend of Dr Beard.

He launched his career 50 years ago as a researcher at Michigan State.

According to Dr Vargas —

I started November 1st, 1968, and by the second week, he dragged me up to Boyne Highlands (in Harbor Springs, Michigan) to put out a snow mold plot.

Before him, we were spray-and-pray guys.

Dr Beard was THE FIRST REAL SCIENTIST to understand why things were happening, such as why there is stress in the plant.

He did the research.

The main thing he taught me was how to be a critical researcher and not just jump into something.

I would go talk to somebody, which usually was him.

Never far away was Harriet Beard, who was a wife and a team-mate.

So much, in fact, that she collaborated with him and their son James on the book « *Turfgrass History and Literature : Lawns, Sports, and Golf* » which was

selected as the 2015 recipient of the American Library Association's Oberly Award for best bibliography in agricultural or natural sciences.

Often, Dr Beard would supply hand-written work, and Harriet, who grew up on a farm that adjoined the Beard family's, would type it up.

Dr Beard's impact is felt still.

According to Dr Ben Wherley, PhD, associate professor at Texas A&M —

I met him when I had just started here (in 2010).

I visited with him and Harriet at their house.

For someone who was supposed to be retired (Beard taught at Texas A&M from 1975 to 1992), he was still very active, and you could see the two of them were very close.

You still could see the enthusiasm for turfgrass science.

It was his life.

We still cite a lot of his workings and teachings.

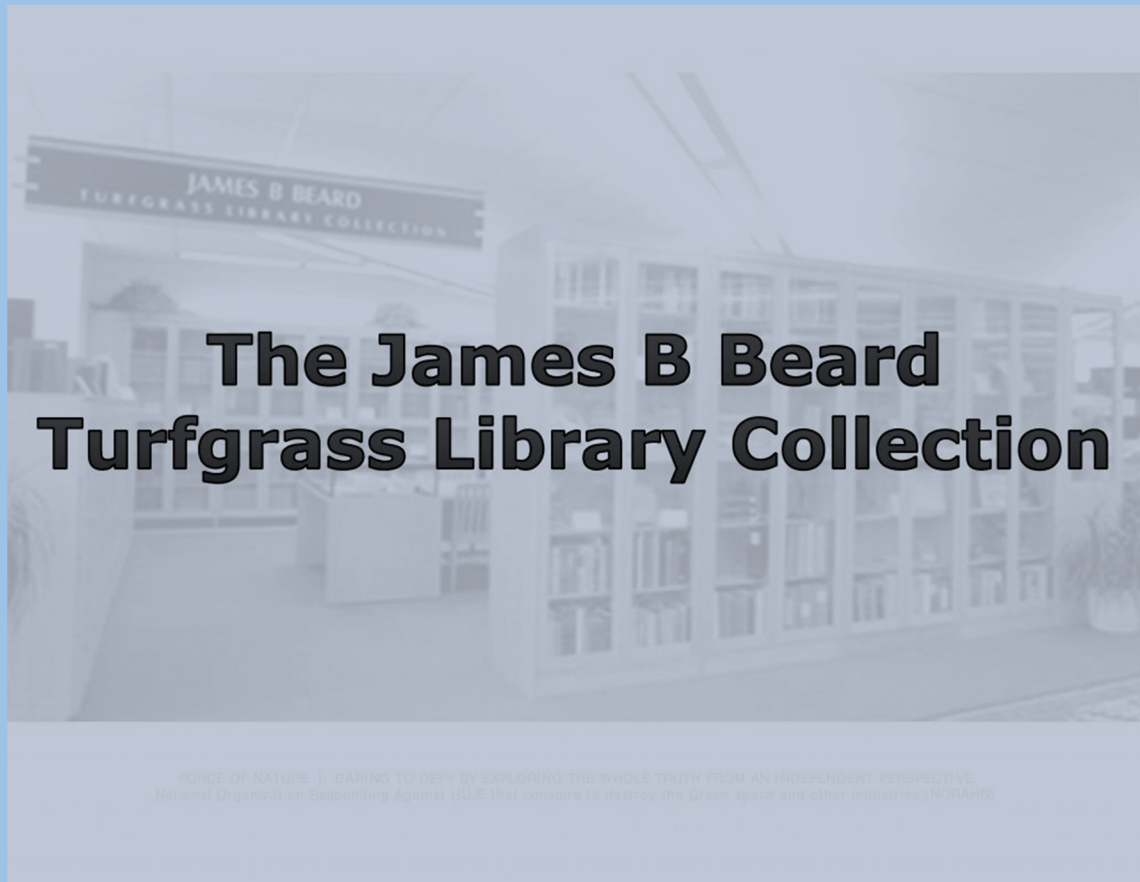
Dr James B Beard 1935 - 2018

The Beard Collection
solidified Michigan State
University as the strongest
public repository of turfgrass
literature in the world



FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against RWJE that conspire to destroy the Green space and other industries (NORAHG)





Retrieved From Web-Site In 2018

Turfgrass Information Center (TIC)

Michigan State University (MSU)

Selected And Adapted Excerpts

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-The-James-B-Beard-Turfgrass-Library-Collection-MSU.pdf>

Legacy Of Harriet And Dr James B Beard Collection

In 2003, the Turfgrass Information Center (TIC) and the Michigan State University (MSU) Libraries received Harriet and Dr James B Beard's impressive collection of turfgrass research materials.

For the 2003 Collection dedication, historic works representing the evolution of published turfgrass science and practice were featured.

The Dr James B and Harriet Beard endowed graduate fellowship at MSU was established to encourage continuation of the high-quality research in the fields of turfgrass science and management they have exemplified.

They have donated their extensive collection of turfgrass books and research materials to MSU's Turfgrass Information Center (TIC) and the MSU Libraries.

Their legacy is noted in this statement from Dr David Martin —

If true success and excellence as an advisor, teacher and researcher are measured by the impact that one's research and students subsequently have on a profession, then the outstanding contributions of Dr and Mrs Beard are without parallel in the history of turfgrass science.

The James B Beard Turfgrass Library Collection is generally acknowledged to be the finest personal compilation of turf-related material in existence, with international coverage of the turfgrass research and management literature, including books, periodicals, and technical reports.

The Beard Collection serves as a non-circulating reference collection within the Turfgrass Information Center (TIC) in the Main Library.

This generous donation continues the efforts by Harriet and Dr James B Beard in support of the Center's work and objectives, including the TIC Endowment.

It was under the direction of Dr Beard, and then-Library Director, Dr Richard Chapin, that the MSU Libraries began to systematically collect printed turfgrass materials in the 1960s.

In 1968, the personal collection of Mr O J Noer, a legendary icon and pioneer turf agronomist, was added to the holdings through the O J Noer Foundation.

[See later segments regarding Mr O J Noer.]

The arrival of the Beard Collection solidified MSU as the strongest public repository of turfgrass literature in the world.

Beard's classic book « *Turfgrass : Science and Culture* », published in 1973 and still in print, continues as the only true treatise ever written regarding turfgrass science.

Much of the book was written within the walls of the MSU Main Library.

His « *Turf Management for Golf Courses* », first released in 1982 and revised in 2002, remains the best-selling reference book in the field.

In 2014, Beard published « *Beard's Turfgrass Encyclopedia for Golf Courses, Grounds, Lawns, Sports Fields* » with the Michigan State University Press.

Dr Beard served at Michigan State University from 1961 to 1975, and at Texas A&M University from 1975 to 1992.

After his retirement from Texas A&M, he became President and Chief Scientist of the International Sports Turf Institute.

Dr James B Beard 1935 - 2018

The Beard Collection is generally
acknowledged to be the finest
personal compilation of turf-
related material in existence



FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against HWE that conspire to destroy the Green space and other industries (NORAHG)





Turf

Champion Of Turfgrass

FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against BLUE that conspire to destroy the Green space and other industries (NORAHQ)

January 1st, 2012

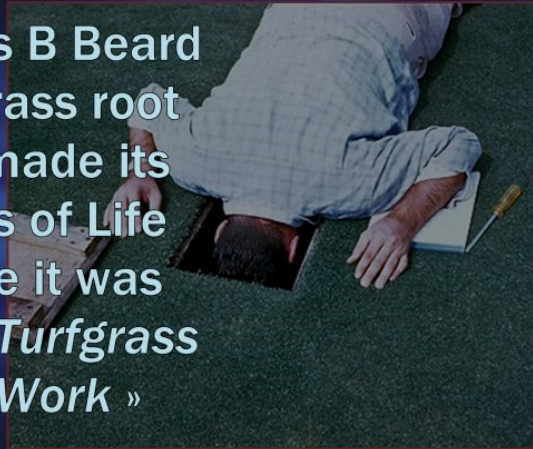
Turf Magazine

Selected And Adapted Excerpts

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Champion-Of-Turfgrass-Turf.pdf>

Dr James B Beard 1935 - 2018

**Photo of Dr James B Beard
checking a turfgrass root
system, which made its
way to the pages of Life
Magazine, where it was
titled, « *Headless Turfgrass
Researcher At Work* »**



FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against HUE that conspire to destroy the Green space and other industries (NORAHG)

A half-century after beginning his career advancing turfgrass science, Dr James B Beard is still hard at it.

So many of the tools now in our arsenal tap into the body of knowledge we've gained from innovative researchers and educators.

At the top of that list on the international level is Dr James B Beard.

Now Director and Chief Scientist of the International Sports Turf Institute, Inc. headquartered in College Station, Texas, and Professor Emeritus of Turfgrass Science, Texas A&M University, he's actively advancing the turfgrass industry.

Turfgrasses have been — and will continue to be — questioned on multiple fronts.

Currently, Dr Beard is leading the charge on one prime issue : the native/non-native/invasive/non-indigenous species issue.

According to Dr James B Beard —

It's on-going in today's public arena by individuals promoting laws to make non-native plants illegal.

Introduced in late 2011, his position paper on « *Origin, Biogeographical Migrations and Diversifications of Turfgrasses* », addresses those challenges.

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Origin-Biogeographical-Migrations-Diversifications-Of-Turfgrasses.pdf>

Dr Beard notes that no one has effectively defined the word « *native* » and admits that, after five drafts, he didn't define it either.

According to Dr James B Beard —

Is it the anthropological event when man became active; when Europeans arrived on the continent; when the first explorers pushed hay off the boat in some island ?!?!

Or, will the newly-introduced research on turfgrasses extend the timeline back beyond the point requiring such precise definition of that term ?!?!

He points to university research taxonomists who draw grass samples from herbariums around the world for analysis.

According to Dr James B Beard —

Recent development of paleo-botanical studies using ultra-structural electron microscopic techniques and stable carbon isotope dating instrumentation and research procedures, plus molecular phylo-genetic research and cladistic bio-geographic analysis of large data sets are clarifying our understanding of migration patterns and dating of multiple secondary centers-of-origin for grasses.

The results of this research propose the appearance of primitive ancestral grasses between 65 and 96 Million Years Ago (mya) in Gondwanan Africa.

Tracking migrations and diversifications shows the emergence of an ancient Poeae group known as the fine-leaf fescues (Festuca) in central-Europe around 13 mya.

Subsequent migrations place them in Patagonia between 3.8 and 10 mya, which is before the anthropological effects of humans.

Clearly the fine-leaf fescues are native to North America and migrated eastward across the continent after the ice age glacial melt around 1 mya.

Delving into research for this project, Dr Beard says —

I felt like a kid with a brand-new PhD I'd wake up at night with an idea or insight and couldn't wait to pursue it.

The resulting paper, Dr Beard says ...

... begins to clarify the question of whether certain turfgrasses are native to North America.

Again setting the stage for what will happen in the future, this paper will start a new series of strictly electronic publications from Michigan State University (MSU).

Free access is important, Dr Beard says ...

... to get it out to the people that are the policy-makers/politicians.

Though he hopes hard copies also will be funded ...

... to get it into the state capitols and libraries of collections for even greater access.

Dr James B Beard 1935 - 2018



Dr James B Beard surrounded by Keith Karnok, Bob Shearman, and other graduate students at Michigan State University

FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against HUIE that conspire to destroy the Green space and other industries (NORAHG)



Seeking Challenges

Dr Beard was well-prepared to face the challenges.

Dr Beard earned his BSc in Agronomy from The Ohio State University; his MS in Crop Ecology and his PhD in Turfgrass Physiology (with an emphasis on Biochemistry) from Purdue University.

He completed a National Science Foundation (NSF) Post-Doctoral Study in Plant Physiology at the University of California-Riverside.

With his basic training in Biochemistry, Dr Beard had the opportunity to go into sophisticated labs working at the molecular level within a highly controlled environment.

He opted instead to focus on turfgrass, working outdoors in an ever-changing environment that he saw as more challenging intellectually.

Through the 1950s, few experiment stations were supporting turfgrass work, and funding for turfgrass research was very limited.

With the main money coming from companies seeking evaluation of their products, turfgrass research was dubbed a « *squirt and peek* » science.

According to Dr James B Beard —

Yet, the targets of those products were the major problem areas at that time.

Turfgrass science was beginning to change when Dr Beard came to Michigan State University in 1961.

According to Dr James B Beard —

We drew an exceptional team of graduate students to turfgrass.

At one time, there were Keith Karnok, John Kaufmann, John King, Jeff Krans, David Martin and Bob Shearman, while my colleagues, Dr Paul Rieke advised Bob Carrow and Dr Bill Meggit advised Al Turgeon.

With this amazing team, research flourished.

According to Dr James B Beard —

In turfgrass, we had the advantage of concentrating on the vegetative state.

With crops such as corn and wheat, researchers must consider the whole complexity of flowering and seed production, which is more difficult in terms of environmental stress throughout all the stages involved.

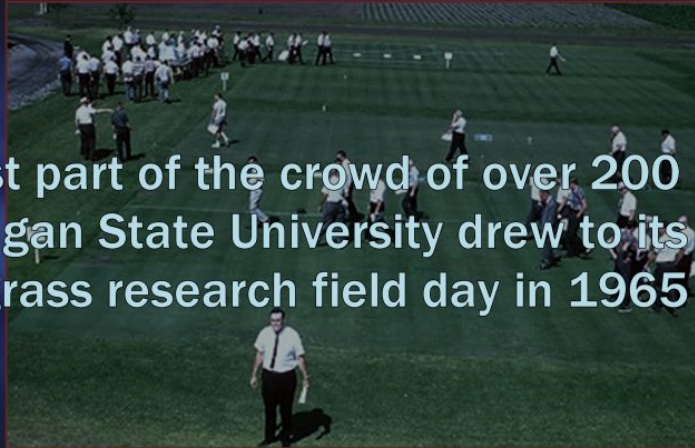
Dr Beard says —

The body of work on turfgrass science and culture influenced the field of crop science and was used in the crop physiology courses as well.



Dr James B Beard 1935 - 2018

**This is just part of the crowd of over 200
that Michigan State University drew to its
third turfgrass research field day in 1965**



FORGE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against HWE that conspire to destroy the Green space and other industries (NORAHG)



Dr James B Beard – Champion Of Turfgrass

Shade Adaptation

Shade adaptation was one of Dr Beard's earliest projects.

According to Dr James B Beard —

It had always been assumed that lack of light was the major factor.

Research showed it was the altered micro-environment, including lack of light, which increased disease stress.

That major break-through led to work on the shade adaptation of cool-season grasses.

Bob Shearman's PhD work centered on the plant mechanisms that allow wear tolerance.

LINK

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Wear-Tolerance-Shade-Adaptation-Investigation.pdf>

Dr James B Beard – Champion Of Turfgrass

Winter-Kill

Other research by Dr Beard focused on the causes of winter-kill.

LINKS

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Winter-Injury-Low-Temperatures-Poa-annua.pdf>

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Winter-Injury-Of-Turfgrasses.pdf>

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Winter-Injury.pdf>

Dr James B Beard – Champion Of Turfgrass

Rhizotron

Graduate student Joe DiPalo constructed the FIRST Turfgrass Rhizotron at Texas A&M during that period.

This allowed the non-invasive viewing of root systems, aiding a variety of basic botanical studies along with a range of work on turfgrass stresses that included the discovery of spring root decline.

The root decline discovery in warm-season grasses impacted fertilization and mowing strategies that reached beyond turfgrass to forage crops.

LINK

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Rhizotron-Spring-Root-Die-Back.pdf>

Dr James B Beard 1935 - 2018

Dr Beard was the author of
turfgrass « *bibles* » like
« *Turfgrass : Science and Culture* »



FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against RWJE that conspire to destroy the Green space and other industries (NORAHG)



Books

Another legacy of that period is Dr Beard's first of nine books, « *Turfgrass : Science and Culture* ».

It was published in 1973 by Prentice Hall and is still selling.

Noted throughout the industry for what would become a tradition « *of in-depth study and exhaustive investigation* », it marked the change from art-dominated turfgrass maintenance to science-dominated.

According to Dr James B Beard —

That doesn't mean art is not still important. Dominance is the key word there.

That publication also marked the beginning of the collaborative process with his wife, Harriet, the typist, fact-checker, and facilitator extraordinaire.

Dr Beard is recording progress, too.

His latest turfgrass history book is working its way toward production at Michigan State University Press.

In 2012, he'll finish the documented history of turfgrasses and soils at St. Andrews.

That project spanned five years of research with unprecedented access to greens committee records.

Dr James B Beard 1935 - 2018

**Touched The Professional Lives
Of Thousands And Thousands
Of Turfgrass Managers,
Researchers, And Educators
Throughout The World**

FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against HUE that conspire to destroy the Green space and other industries (NORAHG)



Dr James B Beard – Champion Of Turfgrass

International Turfgrass Society

Dr Beard's enthusiasm and fore-sight spear-headed the formation of the International Turfgrass Society (ITS) in 1969 and the first International Turfgrass Research Conference.

He served as the first ITS president and remained on the executive committee until 1999.

That led to many international lecture trips, with Harriet as his support team on most of them.



Dr James B Beard – Champion Of Turfgrass

Optimization Of Water Use

Dr Beard continued to teach and to direct and coordinate turfgrass research within the Soil and Crop Sciences Department of Texas A&M from 1975 to 1992.

One of his areas of concentration that continues to evolve is the optimization of water use, the understanding of grass morphology with low water.

According to Dr James B Beard —

Evapo-Transpiration [ET] technology and the impact of effluent water make that on-going research even more relevant.

Water use issues are another area where turfgrasses are being questioned.

According to Dr James B Beard —

The high visibility of turfgrass irrigation makes it a target.

Agriculture uses much of the available water west of the Mississippi River.

Many city irrigation systems are archaic, with 30 to 40 per cent leakage.

Turfgrasses are a minor part of urban usage, yet more entities are restricting turfgrass irrigation.

Some states are monitoring private wells and mandating how much can be pumped for various uses, including turfgrass irrigation.

In times of shortage, water needs to be available in reservoirs where it can be accessed, rather than relying totally on removal via rivers, notes Dr Beard.

Yet, over the last four decades, single-issue activists have been able to block reservoir development in favour of endangered species.

According to Dr James B Beard —

How hard a hit turfgrasses take will depend on how good we are in developing drought-resistant grasses; highly efficient, ET-based irrigation and conservation strategies; and effective use of effluent water.

There are ways around much of this, but it will take research and development, and public education.

Will the money be there to get it done ?!?!

LINKS

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Water-Turfgrass-Selection-Management-To-Achieve-Maximum-Water-Conservation.pdf>

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Water-Turfgrass-Water-Conservation-Strategies.pdf>

Crystal Ball Issues

Dr Beard is spreading the message through his « *future of turfgrass* » presentations and addressing other « *crystal ball* » issues as well.

On the environmental/social-political side, Dr Beard predicts opposition to genetic modification and pesticide use will continue and drive further enhancement in Integrated Pest Management and Best Management Practices programs.

According to Dr James B Beard —

GPS for precise, targeted applications will be expected for large-area turfgrass management.

I anticipate the technology used for facial recognition will extend to spreader or sprayer-mounted digital recognition systems to identify weeds and apply targeted remedies as needed.

I foresee advances in controlled-release nutrients and physiological-enhancer foliar treatments.

There will be expanded use of laser and computer technologies in construction and maintenance procedures.

Dr James B Beard 1935 - 2018

A Legendary Icon And Tireless Researcher Dedicated To The Advancement Of Turfgrass Science

FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against HUE that conspire to destroy the Green space and other industries (NORAHG)



Explore the following links ...

The Benefits Of Turfgrass According To Dr James B Beard

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Benefits-Of-Turfgrass-Positive-Benefits-Of-Turfgrass.pdf>

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Benefits-Of-Turfgrass-The-Heritage-Of-The-Turfgrass-Industry.pdf>

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Benefits-Of-Turfgrass-The-Role-Of-Turfgrasses-In-Env-Protection-Benefits-To-Humans.pdf>

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Beard-Benefits-Of-Turfgrass-Turfgrass-Golf-Course-Benefits-A-Scientific-Assessment-USGA.pdf>

Explore the following link ...

Benefits Of Turfgrasses

<http://pesticidetruths.com/toc/positive-waves-benefits/>

Timeline For Dr James B Beard And Other Legendary Icons

FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against BUJE that conspire to destroy the Green space and other industries (NORAHQ)

Timeline Dr James B Beard And Other Legendary Icons

During The Early 1920s

In the State of Wisconsin, the Milwaukee Sewerage Commission established a fellowship at the University of Wisconsin's College of Agriculture.

Under the direction of Professor Emil Truog, the university investigated the use of activated sewage sludge as a fertilizer.

Legendary icon O J (Oyvind Juul) Noer was named as the fellow to carry out the work.

Mr Noer determined the analysis of the fertilizer derived from bio-solids that would later be named « *Milorganite* ».

His analysis of Milorganite was 6.2 per cent total nitrogen (N), 5.17 per cent water-insoluble nitrogen, 2.63 per cent available phosphate (P_2O_5), 0.4 per cent soluble potash (K_2O), and 4.0 per cent organically complexed iron (Fe).

Through field research, Mr Noer discovered several advantages to using Milorganite on turf —

- Fertilization with Milorganite represented no danger of burning turf, even with mis-application. (Its salt index value is 2.)
- Fertilization with Milorganite produced turf that was dense and dark green in colour.
- Milorganite was less expensive to use, since it was one-third the cost of the most commonly used fertilizers at the time.

By **1925**, the Milwaukee Sewerage Commission concluded that producing and marketing the fertilizer could solve the problem of disposal of its bio-solids.

The commission hired Mr O J Noer as salesman.

Timeline Dr James B Beard And Other Legendary Icons

1925 – The Story Of Milorganite

In the State of Wisconsin, the Milwaukee Sewerage Commission began the disposal of its bio-solid waste by producing and marketing a granular organic fertilizer.

The commission began a marketing campaign.

In **1925**, the « *National Fertilizer Magazine* » was used to advertise a contest for selecting a name for the Milwaukee's new organic fertilizer.

The name « *Milorganite* » was chosen from two hundred and thirty-three names submitted through the contest.

The name Milorganite was based upon a loose anagram of « **MIL**waukee **ORG**Anic **NIT**rog**En** ».

The contest winner was McIver and Son, of Charleston, South Carolina.

A logo was then designed for Milorganite.

It would state : « *Milwaukee. Milorganite. Ideal turf fertilizer.* »

The Milwaukee Sewerage Commission hired legendary icon O J (Oyvind Juul) Noer as salesman.

O J Noer soon became a very famous and highly respected consultant.

Someone else, with similar initials, capitalized on Mr Noer's fame.

In **1967**, in the province of Quebec, legendary icon Otto Jangl founded O J Company.

His business specialized in the distribution of products for the Green Industry in Eastern Canada.

LINK

<http://pesticidetruths.com/wp-content/uploads/2013/09/Force-Of-Nature-Hero-2009-01-27-Otto-Jangl-1924-2008-The-Lion-Of-The-Green-Space-Industry-Extended-Version-REFERENCE.pdf>

In 1928 And 1929 – Penn State

In the United States, research and teaching programs were initiated at the « *Pennsylvania State University* » (also known as « *Penn State* ») by Dr H Burton Musser and Fred Grau, and in New Jersey by H B Sprague.

Over thirty years later, in **1959**, Dr Musser was succeeded by Joseph M Duich.

In **1950**, legendary icon Dr H Burton Musser published a book entitled « *Turf Management* ».

This book remained the « *bible* » for the turf maintenance industry, until twenty-three years later.

In **1973**, Dr James B Beard published the « *new bible* » entitled « *Turfgrass : Science and Culture* ».

During The Mid-1930s

In the State of Wisconsin, legendary icon O J (Oyvind Juul) Noer set up a laboratory for measuring essential nutrients in turfgrass clipping.

Mr Noer determined that the « *basic nutrient ratio* » in turf tissues was 3-1-2 (N-P₂O₅-K₂O).

This directly led to recommendations of annual fertilization programs that followed this ratio.

(i.e. 3 pounds of nitrogen (N), 1 pound of phosphorus (P₂O₅), and 2 pounds of potassium (K₂O) per 1000 square feet.)

For many years, the turf maintenance industry thought that the basic nutrient ratio should be 1-4-2 (N-P₂O₅-K₂O).

Mr O J Noer also pioneered the laboratory procedures and sampling techniques for the soil testing of turf.

Mr Noer established a soils laboratory dedicated exclusively for turf.

Mr O J Noer worked for the Milwaukee Sewerage Commission.

This company manufactured Milorganite, a granular organic fertilizer.

This fertilizer was derived from the bio-solids left over from the Jones Island Wastewater Treatment Plant, in Milwaukee.

The name « *Milorganite* » was chosen through contest held in **1925**.

The contest winner had created a loose anagram of « *MILwaukeeORGanic NITrogEn* ».

Mr O J Noer passed away in **1966**.

Timeline Dr James B Beard And Other Legendary Icons

1950 – The Adventures Of Musser

In the United States, legendary icon Dr H Burton Musser first published a book entitled « *Turf Management* », which was sponsored by the « *United States Golf Association* » (USGA).

This book remained « *the bible* » for the turf maintenance industry for an entire generation, until twenty-three years later.

In **1973**, Dr James B Beard published the « *new bible* ».

Over twenty years earlier, in the period of **1928** and **1929**, Dr Musser initiated research and education programs at the « *Pennsylvania State University* » (also known as « *Penn State* »).

In **1959**, Dr Musser was succeeded by Joseph M Duich.



Dr H Burton Musser Published « *The Bible* » In 1950

LINK

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Musser-Advanced-Turfgrass-Management-July-1959.pdf>

1966 – The Adventures Of O J Noer

In the United States, legendary icon O J (Oyvind Juul) Noer passed away.

Mr Noer was instrumental in the success of Milorganite as well as establishing the modern turfgrass industry.

His achievements were so advantageous he was formally given the title « *Mr Turf* » by the Golf Course Superintendents Association of America (GCSAA).

In the early 1900's, Milwaukee's Sewerage Commission established a fellowship at the University of Wisconsin-Madison College of Agriculture to investigate the many potential applications of Milorganite as a fertilizer.

Mr Noer led the work and conducted extensive field trials rather than relying on chemical analysis, which was standard for the day.

After experimenting with field crops and vegetables, Mr Noer used this new slow-release nitrogen fertilizer on golf course turf with superior results.

As word spread across the country among golf course superintendents about this new fertilizer, Mr Noer knew he had a commercially viable product.

The soils-testing laboratory established by Mr Noer was the first of its kind in the United States.

Mr Noer developed soils testing protocols and evaluation tools that were so far beyond his time some of them are still used today.

Throughout his career, Mr Noer extensively spoke at turf conferences and wrote on the subject of turfgrass and fertilizer, including a series of articles titled « *The ABC of Turf Culture* », which was later published as a book and represents one of the earliest comprehensive books on the subject of turf maintenance.

Mr Noer achieved venerable and legendary iconic stature within the turf industry for his willingness to share his vast knowledge of turfgrass.

During his time with Milorganite, it is estimated that he visited more than 80 per cent of the golf courses in the country assisting greens-keepers to diagnose and offer advice on how to treat turf problems based on research-based knowledge.



Mr O J Noer Was THE Fertilizer Expert And Consultant

LINKS

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Noer-History-Of-Milorganite.pdf>

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Noer-OJ-Noer-Research-Foundation.pdf>

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Noer-The-ABC-Of-Turf-Culture-March-1927.pdf>

<http://pesticidetruths.com/wp-content/uploads/2018/05/Reference-Noer-The-ABC-Of-Turf-Culture-September-1927.pdf>

1966 – Turfgrass Research

Legendary icon Dr James B Beard of the United States, and Bjarne Langvad of Sweden, established the International Turfgrass Research Conference (ITRC).

J R Escritt and J R Watson were also involved.

Three years later, in **1969**, the first ITRC conference was held in Harrogate, England.

The ITRC has since held a conference every four years — Virginia Polytechnic Institute in Blacksburg, Virginia, USA (**1973**), Munich, West Germany (**1977**), the University of Guelph, Ontario, Canada (**1981**), Avignon, France (**1985**), Tokyo, Japan (**1989**), Palm Beach, Florida, USA (**1993**), Sydney, Australia (**1997**), Toronto, Ontario, Canada (**2001**), Wales, United Kingdom (**2005**), Chile (**2009**), China (**2013**), New Brunswick, New Jersey, USA (**2017**), Copenhagen, Denmark (**2021**), Japan (**2025**), and more.



Dr James B Beard Established International Research

Timeline Dr James B Beard And Other Legendary Icons

1973 – Turfgrass Bibles

In the United States, legendary icon James B Beard published a book entitled « *Turfgrass : Science and Culture* ».

This book remained the « *bible* » for an entire generation of turf maintenance professionals.

Other legendary icons have also written « *bibles* ».

Twenty-three years earlier, in **1950**, Dr H Burton Musser published the first « *bible* », entitled « *Turf Management* ».

In **1928**, Mr O J Noer published the earliest comprehensive « *bible* » entitled « *The ABC of Turf Culture* ».

Timeline Dr James B Beard And Other Legendary Icons

References

Beard, 1973.

Turfgrass : Science and Culture.

The author is Beard, James B

Prentice-Hall Inc. : Englewood Cliffs, New Jersey.

Daniel & Freeborg, 1979.

Turf Manager's Handbook.

The authors are Daniel, W H, and R P Freeborg

Harvest Publishing Company : Cleveland, Ohio.

Lloyd, 1997.

Tom Mascaro – Entrepreneur Extraordinaire.

The author is Lloyd, Clay.

From Golf Course Management. January 1997.

Milorganite.

Our History.

From Milorganite Lawn & Garden Products.

The author is anonymous.

The date of publication is unknown.

The information was retrieved from a page on the Internet during 2006
– this page is no longer found.

The page was <http://www.milorganite.com/about/history.cfm>

Waddington *et al*, 1992.

Turfgrass.

Number 32 in the series *Agronomy*.

Co-editors are Waddington, D V, R N Carrow, and R C Shearman.

American Society of Agronomy, Inc. : Madison, Wisconsin USA.

Explore the following links ...

More Heroes And Legendary Icons Of The Green Space Industry

Dr Jack L Eggens

<http://pesticidetruths.com/2013/09/17/dr-jack-l-eggens-1936-2013-the-great-communicator-2013-08-26/>

Mr Douglas Meyer

<http://pesticidetruths.com/wp-content/uploads/2013/09/Force-Of-Nature-Hero-2011-02-18-Doug-Meyer-Positive-Waves-Beaconsfield-GC-Audubon-Status-pdf-300-dpi.pdf>

Mr Des Rice

<http://pesticidetruths.com/wp-content/uploads/2013/09/Force-Of-Nature-Hero-2011-04-14-Des-Rice-1949-2011-Greatest-Lawn-Care-Businessman-pdf-300-dpi.pdf>

Norah GFON

All good heroes must never come to an end

FORCE OF NATURE | DARING TO DEFEY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against HUIE that conspire to destroy the Green space and other industries (NORAHG)

We Speak The Whole Truth About Heroes Like Dr James B Beard

We are the **N**ational **O**rganization **R**esponding **A**gainst **H**UJE that conspire to destroy the Green space & other industries (**NORAHG**).

NORAHG is a non-profit & independent organization that reports on the work of several highly-rated leading experts who have recognized expertise, training, & backgrounds in matters concerning pest control products, & who promote environmental realism & pesticide truths.

NORAHG produces **A Look At ... & Force Of Nature** reports & blogs which are destined for the green space industry, nation-wide across Canada, the United States, & overseas, & can be found on **The Pesticide Truths Web-Site** ... <http://pesticidetruths.com/>

A Look At ... & Force Of Nature reports & blogs were the brain-child of William H Gathercole (now retired) & his colleagues.

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

FIELDS OF UNIVERSITY STUDY — • Crop, Horticulture, & Turfgrass Sciences • Mathematics & Physics

ALMA MATERS — • McGill University • University of Guelph • the first person ever to obtain bachelors of science degrees & contribute directly to both the professional lawn care & golf maintenance industries.

EXPERTISE — • turf & ornamental maintenance & troubleshooting • history of the green space industry • sales & distribution of seeds, chemicals, fertilizers, & equipment • fertilizer manufacturing & distribution • environmental issues & anti-pesticide terrorism.

NOTABLE ACTIVITIES — • worked in virtually all aspects of the green space industry, including golf maintenance, professional lawn care, tree & shrub care, distribution, environmental compliance, government negotiations, public affairs, & workplace safety • the supervisor, consultant, & programmer for the successful execution of hundreds-of-thousands of management operations in the golf course & urban landscape, as well as millions of pest control applications • the advisor, instructor, & trainer for thousands of turf & ornamental managers & technicians • the pesticide certification instructor for thousands of industry workers • a founder of the modern professional lawn care industry • the prolific writer for industry publications, reports, & blogs • the first to confirm the invasion of European Chafer insects in both the Montreal region & the Vancouver / Fraser Valley region • with Dr Peter

Dernoeden, the first to confirm the presence of Take All Patch as a disease of turf in Eastern Canada • with Dr David Shetlar, the first to confirm the presence of Kentucky Bluegrass Scale as an insect pest in south-western Ontario, & later, in the Montreal & Vancouver regions.

SPECIAL CONTRIBUTIONS — • the creator of the Pesticide Ban Exception Status that allowed the golf industry to avoid being subjected to anti-pesticide prohibition for a generation • the creator of the signs that are now used for posting after application • the co-founder of annual winter convention for Quebec golf course superintendents • the founder of the first ever Turf Summit with guest Dr Jack L Eggens <https://wp.me/p1jq40-7dT> • the major influence in the decision by Canadian Cancer Society to stop selling-for-profit fresh pesticide-treated daffodils <https://wp.me/P1jq40-10W> • the only true reliable witness of the events of anti-pesticide prohibition in the town of Hudson, Quebec <https://wp.me/p1jq40-asu> • the founder (now retired) of A Look At ... & Force Of Nature reports & blogs.

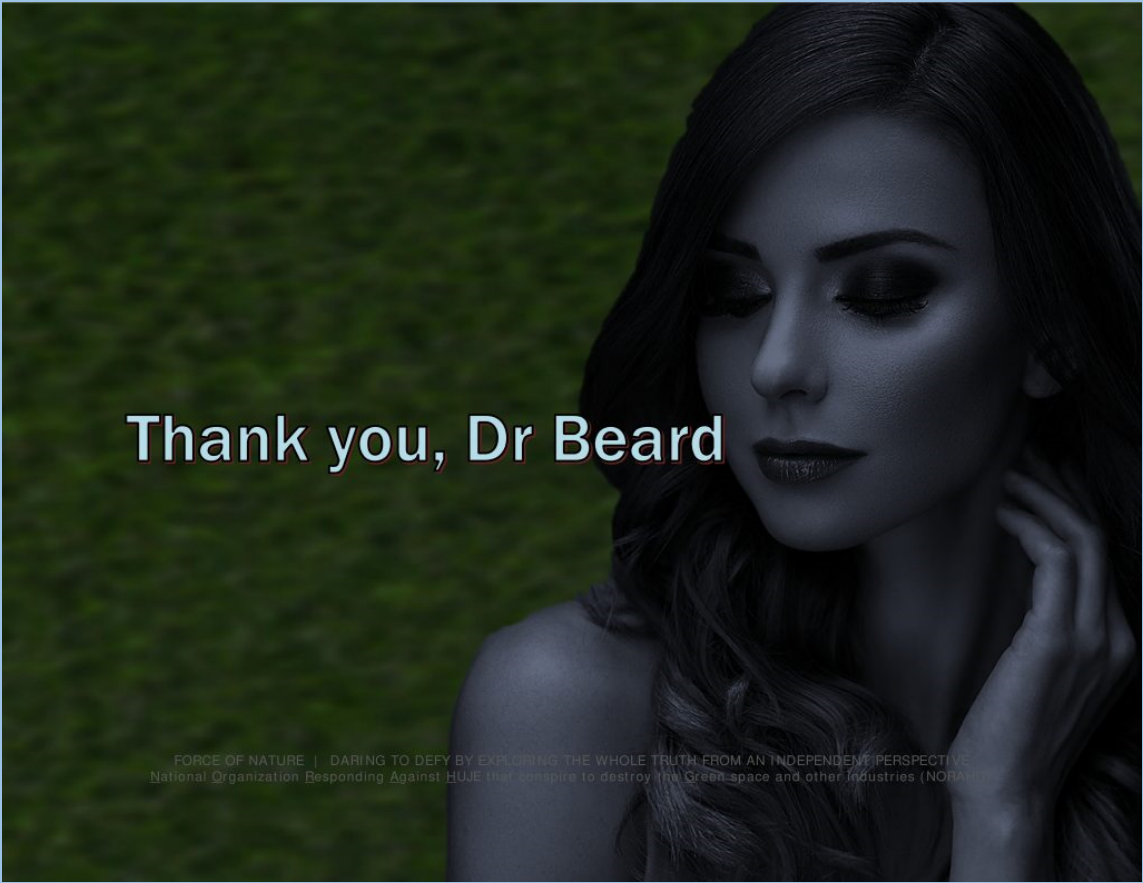
NOTABLE AWARD — • the first man-of-the-year for contributions leading to the successful founding of the Quebec professional lawn care trade association, which served as a beach-head against anti-pesticide activists in the 1980s & 1990s.

LEGACIES — Mr Gathercole & his colleagues ... • designed & implemented strategies that reined anti-pesticide activists & provided peace & prosperity for the entire modern green space industry for a generation • orchestrated legal action against anti-pesticide activists in the town of Hudson, Quebec • launched the largest founding professional lawn care business in the nation • quadrupled the business revenues of one of the largest suppliers in the nation.

Mr Gathercole is now retired, although his name continues to appear as the founder of A Look At ... & Force Of Nature reports & blogs.

We dare to defy by exploring the whole truth from an independent perspective on The Pesticide Truths Web-Site ... <http://pesticidetruths.com/>

If you wish to receive free reports & blogs on issues that concern you, please contact us at ... force.of.de.nature@gmail.com WILLIAM H GATHERCOLE AND NORAH G



Thank you, Dr Beard

FORCE OF NATURE | DARING TO DEFY BY EXPLORING THE WHOLE TRUTH FROM AN INDEPENDENT PERSPECTIVE
National Organization Responding Against HUIE that conspire to destroy the Green space and other industries (NORAHUIE)
