EUROPEAN TURFGRASS SOCIETY

NEWSLETTER 02/2016

Via Quintarello, 12/A – 36050 Quinto Vicentino (VI) – ITALY
www.turfgrasssociety.eu
etsoffice@turfgrasssociety.eu

IN THIS MAY 2016 NUMBER:

5th ETS Conference in Algarve
5-8th June 2016
Albufeira (PORTUGAL)

http://ets2016.ualg.pt

On behalf of the **ETS - European Turfgrass Society, the University of Algarve** is happy to welcome ETS members and other turfgrass specialists to the 5th ETS Conference 2016 in Albufeira, Portugal.

ETS organizes its scientific turfgrass conference every two years. Italy (2008), France (2010), Norway (2012) and Germany (2014) were the previous hosts of this international conference. Portugal has been chosen to host the event in 2016, from 5th – 8th June 2016.

The meeting venue is the Algarve's largest Congress Centre and one of the largest in the Iberian Peninsula, a fantastic facility equipped with cutting-edge technology: the **Algarve Congress Palace, at the Salgados Palace Hotel, Algarve, Albufeira**.

The Organising Committee with Prof. Carlos Guerrero as convener, is preparing this international congress under the theme:

"TURFGRASS – TOWARDS SUSTAINABILITY AND PERFECTION FOR AESTHETIC, RECREATION AND SPORTS"

UAlg FCT
UNIVERSIDADE DO ALGARVE
FACULDADE DE CIÊNCIAS E TECNOLOGIA

5th ETS Conference program

June 5th 2016

Evening (18-20h), Registration and Poster Placement

June 6th 2016

8:30-9:15h – Registration and Poster Placement
9:15-10:00h – Convener and ETS Board Welcome speech

10:00-13:00h – **Turfgrass genetics and breeding**
Chairman: Marco Volterrani

- ***Genetic Improvement of Bermudagrass for Turf Quality and Sustainable Traits***, Yanki Wu, Justin Moss, Dennis Martin and Nathan Walker
- ***A non-GM Herbicide Resistant System for Seashore Paspalum Turfgrass***, Paul Raymer, Zhenbang Chen, Douglas Heckart and Wayne Parrott
- ***Introduced brown patch disease resistance in transgenic tall fescue***, Binbin Zhou, Ana Bailey, C. L. Niblett, Hong Luo and Rongda Qu
- ***Associations between ploidy level and genetic diversity of bermudagrass as assessed by iPBS retrotransposon marker***, Cansu Simsek, Nedim Mutlu, Songul Sever Mutlu and Osman Gulsen

11:15-11:45h – Coffee break

- ***Gamma-ray Irradiation Improves turfgrass characteristics of St. Augustinegrass***, Mert Çakir, Songul Sever Mutlu, Haris Djapo
- ***Breaking the apomictic barrier in Bahiagrass to enhance its aesthetic value***, Esteban Rios, Kevin Kenworthy, Ann Blount, Kenneth Quesenberry, Bryan Unruh, John Erickson, Fredy Altpeter and Patricio Munoz
- ***Genetic, Adaptive, Morphological and Drought Resistance Variabilities in Eastern Mediterranean Bermudagrass Accessions***, Songul Sever Mutlu, Nedim Mutlu, Osman Karaguzel, Robert C. Shearman
- ***Increased tolerance to copper ions in lawn grass***, Gladkov Yevgeny Aleksandrovich, Dolgikh Yuliya Ivanovna, Gladkova Olga Victorovna

13:00-14:30h – *LUNCH*
14:30-15:00h – **Keynote speaker:** José Monteiro (*Turf, mankind and landscape*)

15:00-16:45h – **Turfgrass and landscape**
Chairman: Panayiotis Nektarios

- ***Comparing four bermudagrass and five zoysiagrass cultivars under heavy use at kindergartens***, Yoshiaki Ikemura and Masayoshi Hastukade
- ***Varying Management Practices for the Improvement of Bermudagrass Accessions under Low Light Conditions***, Jeffrey Dunne, W. Casey Reynolds, Consuelo Arellano, Grady L. Miller and Susana R. Milla-Lewis
- ***The potential to increase delivery of multiple ecosystem services of urban grasslands***, Hans Martin Hanslin, Jörgen Wissman and Trygve Aamlid
- ***Turf quality and species succession of Bermudagrass and Kentucky bluegrass mixtures***, Alessandro Menegon, Stefano Macolino, John H. McCalla, Filippo Rimi and Michael D. Richardson
- ***Impact of different management practices on turfgrass quality, botanical composition, colour and growth of urban lawns***, Pavel Knot, Frantisek Hrabe, Stanislav Hejduk, Jiri Skladanka, Michal Kvasnovsky, Lucie Hodulikova and Iva Klusonova
- **Quality assessment of three warm-season turfgrasses growing on shallow green roof systems with different substrate depths**, Ntoulas N., Nektarios P.A., Kotopoulis G., Ttouolou Th. and Ilia I.
- ***Golf courses as a part of urban lawns: results of interdisciplinary research on different aspects of extensively managed turfgrass areas from Nordic perspective***, Maria Ignatieva, Fredrik Eriksson, Tuula Eriksson, Pernilla Tidåker, Karin Ahrné, Jörgen Wissman, Håkan Marstorp, Christopher Poeplau, Thomas Katterer

16:45-17:15h – Coffee break
17:15-17:45h – **Keynote speaker:** Jason Kruse (*Maximizing turfgrass performance: It's not as simple as it some think*)
17:45-18:15h – **Sponsors Space for short presentations**

18:20-19:05h – **Turfgrass for sports**
Chairman: To be designated by ETS

- ***Putting Green Turfgrass Evaluations to Reduce Maintenance Costs and Improve Sustainability***, Kevin Morris and Guang Ling Gao
- ***Economic and technical analysis in construction and maintenance for professional soccer fields***, Alberto Minelli, Alessandro De Luca, Rino Ghelfi, Laura Cevenini, Ilaria Pasini
- ***Using turf colorants and pigments for potential long-term colour of dormant warm-season grasses***, Grady Miller and L. B. McCarty

19:30-21:00h – *WELCOME COCKTAIL*

June 7th 2016

8:30-9:00h – **Keynote speaker:** Richard Snyder (*Low-cost Urban ET Measurements and Estimates*)

9:15-10:45h – **Water management**
Chairman: Celestina Pedras

- ***Modelling irrigation demand and value of water for golf in Europe***, Jerry Knox, Juan A. Rodriguez-Diaz, Dolores Rey, Javier Calatrava and Andre Daccache
- ***Irrigation Requirements for Perennial Ryegrass (Loliumperenne L.) Salinity Management***, Marco Schiavon, A. Miehls, Bernd Leinauer, D.L. Suarez, and J.H. Baird
- ***Irrigation strategies on sand-based creeping bentgrass (Agrostis stolonifera) putting greens***, Trygve S. Aamlid, H. Riley, A. Kvalbein, T. Pettersen and J.W Knox
- ***Assessing evidence on the agronomic and environmental impacts of turfgrass irrigation management***, Carlos Gómez, Jerry W. Knox, Agnar Kvalbein and Trygve S. Aamlid
- ***Improving Water Use Efficiency with Soil Incorporation of Organic Matter***, Clint Waltz and E. Bauske
- ***Soil surfactants and trinexapac-ethyl improve turf quality and rooting characteristics of bermudagrass and seashore paspalum under deficit irrigation***, Matteo Serena, Marco Schiavon and Bernd Leinauer

10:55-11:25h – Coffee break (and poster space)
11:25-11:55h – **Keynote speaker:** Filippo Lulli (*Precision farming practices in sports turf management*)

12:15-13:00h – **Technology advances and turfgrass maintenance (mowing, fertilization, environment, certification)**
Chairman: Carlos Guerrero

- ***Fertilizer Use Restrictions and Organic Lawn Care: Evaluation of Compost Tea, Compost Topdressing and Cultivation on Tall Fescue Color, Quality and Weed Encroachment***, Siqi Chen, Mark J. Carroll and Thomas R. Turner
- ***Effects of nitrogen, phosphorus, mowing height and mycorrhiza inoculation on turf quality and competition against annual bluegrass (Poa annua) on pure red fescue (Festuca rubra) and mixed fescue / bentgrass (Agrostis sp.) golf greens***, Sara Calvache, Tatsiana Espevig, Erik Joner, Tina E. Andersen, Trond Pettersen and Trygve S. Aamlid
- ***Satellite monitoring of turfgrass sod production: image analysis, interpretation and new sod-specific vegetational indices***, Filippo Lulli, C. de Bertoldi, J.M. Lopez, G. Pons and D. Micallef

13:00-14:00h – *LUNCH*
14:00-14:30h – **Keynote speaker**: Tom Hsiang (*Conventional fungicides vs. disease resistance activators*)

14:45-16:00h – **Turfgrass pests (diseases, insects, weeds)**
Chairman: Maria Albertina Gonçalves

- ***Management of Bentgrass Cultivars for Activated Resistance to Microdochium Patch (Microdochium nivale) Under Climate Change Conditions***, Sara Stricker, T. Hsiang, and A. Bertrand
- ***A Nordic model for implementing Integrated Pest Management - collaboration between authorities and the turfgrass industry***, Agnar Kvalbein, Arne Tronsmo, Anne Mette Dahl Jensen, Karin JuulHesselsøe, Trygve S. Aamlid and Maria Strandberg
- ***Post-Application Irrigation Timing and Formulation Affects Azoxystrobin Retention in Hybrid Bermudagrass Clippings***, Matthew Jeffries, Travis Gannon and Fred Yelverton
- ***Influence of Ferrous Sulfate and its Elemental Components on Dollar Spot Suppression***, Erik Ervin, Shelton, C., McCall, D., Reams, N., and Askew, S.
- ***Best Management Practices Effects on Anthracnose Disease of Annual Bluegrass***, James W. Hempfling, Bruce B. Clarke and James A. Murphy
- ***Overseeding of fairways to reduce weed competition***, Anne Mette Dahl Jensen, Oliver Bühler, Agnar Kvalbein and Trygve Aamlid

16:15-16:45h – Coffee break (and poster space)

16:45-18:00h – **Turfgrass nutrition and physiology**
Chairman: To be designated by ETS

- ***Bermudagrass Dormancy Avoidance using a Commercial Microbial Concentrate***, Diego Gómez de Barreda, De Luca, V. and Moumni, M.A.
- ***Plant colorants interfere with non-destructive colour analysis***, Glen R. Obear, William C. Kreuser and Douglas J. Soldat
- ***The effect of ice encasement and two protective covers on the winter survival of six turf grasses on putting greens***, Wendy M. Waalen, Tatsiana Espevig, Agnar Kvalbein and Trygve S. Aamlid
- ***Potential Benefits of Using Pigment-Containing Product on Creeping Bentgrass and Hybrid Bermudagrass putting greens***, A.W. Gore, L.B. McCarty, C.E. Wells and S.B. Martin

18:15-19:15h – **ETS General Assembly**

20:30h – *GALA DINNER*

Poster Presentation

Turfgrass genetics and breeding

- ***Use of genotype by sequencing to develop a high density SNP-based linkage map in zoysiagrass***, Susana Milla-Lewis, H. McCamy Pruitt, Jeff C. Dunne, Brian M. Schwartz, Aaron J. Patton and Consuelo Arellano
- ***Work out of ecobiotechnological methods for meadow grasses***, Litvinova Ilina Igorevna, Gladkov Yevgeny Aleksandrovich and Gladkova Olga Victorovna

Turfgrass and landscape

- ***Seashore paspalum in the Mediterranean transition zone: phenotypic traits of twelve accessions during and after establishment***, Monica Gaetani, Marco Volterrani, Lisa Caturegli, Simone Magni, Claudio Leto, Salvatore La Bella, Teresa Tuttolomondo, Giuseppe Virga and Nicola Grossi
- ***Golf course management strategies for improving biodiversity in naturalized roughs***, Cristina Pornaro, A. De Luca and S. Macolino
- ***Multifunctionality in urban golf courses - a case study in the Stockholm area, Maria Strandberg***, S. Borgström and E. Andersson
- ***Hard and Red Fescues suit the best for Alley grassing in fruit orchard in dry conditions***, Stanislav Hejduk and Kvasnovský, M.
- ***Heavy metal leaching from adaptive green roof systems sodded with tall fescu***e, Maria Kaltsidi, N. Ntoulas, G. Danezis, C. Georgiou and P.A. Nektarios

Turfgrass for sports

- ***Managing Golf Greens: aligning golf green quality with resource inputs***, Stewart Brown
- ***Evaluation of Key Methodology for Digital Image Analysis of Turfgrass Colour***, Chenxi Zhang, Garland D. Pinnix, Zheng Zhang, Grady L. Miller and Thomas W. Rufty
- ***Site-specific precision maintenance of sports turfgrass***, David Frade, Silva, J.R., Andrade, R. and Guerrero, C.
- ***Evaluation and Improvement of Golf Course Management Online Classes***, Renata Mundim, Pamela Sherratt, David Gardner and Karl Danneberger
- ***Turfgrass maintenance and management in soccer fields in Slovenia***, Miha Curk, Matej Vidrih, Žiga Laznik and Stanislav Trdan

Water management

- ***Reclaimed water use for turfgrass irrigation***, Lídia Dionísio, Bueno, F., Gonçalves, M.A. and Guerrero, C.
- ***Establishment and Nitrate Leaching of Three Warm-Season Grasses Irrigated with Tailored Water***, Elena Sevostianova, Jennifer Skerker, Matteo Serena, Patrizia Rollo and Bernd Leinauer

Technology advances and turfgrass maintenance (mowing, fertilization, environment, certification)

- ***Can robotic mowing improve the quality of the lawn?***, Nicola Grossi, Marco Fontanelli, Elisa Garramone, Andrea Peruzzi, Michele Raffaelli, Michel Pirchio, Luisa Martelloni; Christian Frasconi, Lisa Caturegli, Monica Gaetani, Simone Magni and Marco Volterrani
- ***Radiation Extinction within a Canopy of hybrid Bermudagrass***, Marco Volterrani, Monica Gaetani, Nicola Grossi, Simone Magni and Lisa Caturegli
- ***Using digital image analysis and a green color chart to determine turfgrasscolor***, Yoshiaki Ikemura and Masayoshi Hastukade
- ***Evaluation of VARI and NDVI to remote sensing turfgrass quality***, Carlos Guerrero, Fernando Martins,Rui Lança,Helena Fernandez,Rita Andrade and Celestina Pedras
- ***Reseeding Interval Following Methiozolin ('PoaCure') Application***, William J. Johnston and Charles T. Golob

Turfgrass pests (diseases, insects, weeds)

- ***An Investigation of Turfgrass as a Possible Route for Pollinator Exposure to Lawn-Applied Imidacloprid***, James D. McCurdy, Jonathan M. Gunn and David W. Held
- ***A multiplex end-point PCR assay for the detection and identification of three species of Ophiosphaerella that cause spring dead spot of bermudagrass***, Juan F. Iturralde-Martinez, Francisco J. Flores, Alma R. Koch, Carla D. Garzon and Nathan R. Walker
- ***Ozone Application for dollar spot incidence reduction in a bentgrass golf green***, Diego Gómez de Barreda and De Luca, V.
- ***Plant-parasitic Nematodes associated to the golf courses in Southern Portugal (Algarve)***, Albertina Gonçalves, Duarte, J., Dionísio, L. and Guerrero, C.
- ***Trichodermagamsii as a biological control agent of turfgrass diseases***, Luísa Coelho, Dionísio, L., Bueno, F., Reis, M., Duarte, J. and Guerrero, C.
- ***Microbiological products for control of Microdochium nivale on golf greens***, Trygve S. Aamlid and Tatsiana Espevig
- ***Entomopathogenic fungi for biological control of turfgrass diseases***, Fran Bueno Pallero, Dionísio, L., Guerrero, C. and Neto, L.
- ***An Integrated Nutritional and Chemical Approach to Poa annua Suppression in Creeping Bentgrass Greens***, Erik Ervin, N. Reams, X. Zhang, A. Boyd and S. Askew
- ***Identification of Zoysiagrass Genotypes with Resistance to Large Patch under Controlled Environmental Conditions***, M. Carolina Zuleta, Susan P. Gomez, Consuelo Arellano, Norma Flor, Philip F. Harmon, Kevin E. Kenworthy and Susana R. Milla-Lewis
- ***Observing the impact of fungicide applications on the phyllosphere microbial community***, J.A. Roberts, J.R. Doherty, M. Botti-Marino, D.F. Ritchie and J.P. Kerns

Turfgrass nutrition and physiology

- ***Germination of Tall Fescue Caryopses Exposed for Long Term at Low Temperature***, Antonio Pompeiano, Damiani C. R., Stefanini S., Vernieri P., Volterrani M. and Guglielminetti L.

- ***High-temperature effects on seed germination of fourteen Kentucky bluegrass cultivars***, Maurizio Giolo, Antonella DallaMontà, Erica Barolo, Fabio Ferrari, Roberta Masin and Stefano Macolino
- ***Estimated net ecosystem exchange (NEE) of turfgrass at different management intensities in a golf course in the province of Verona***, Alberto Minelli, Daniele Zuffa, Laura Cevenini, Matteo Corradini, Ilaria Pasini and Marco Volterrani
- ***Contribution of grass clippings to turfgrass fertilization under four N levels***, Guillaume Grégoire, Catherine Bajzak and Yves Desjardins
- ***Biogeochemical Cycling of Carbon and Nitrogen in Cool-Season Turfgrass Systems***, Quincy D. Law and Aaron J. Patton
- ***Loss on ignition: a rapid and simple method to monitor soil organic matter content under different turfgrass covers grown in Central Chile***, Alejandra Acuña and T. Karl Danneberger
- ***Experimental evaluation of golf courses grasslands as a CO_2 sink***, Sara Muñoz Vallés, Diaz-Barradas MC, Cambrollé J, Guerrero C, Bueno Pallero FA, Dionísio L, Gonçalves MA and Neto L

June 8th 2016

Technical Tour

Herdade dos Salgados Golf
08:00h – Technical visit departure (from NAU Salgados Palace)
08:15-10:15h – Herdade dos Salgados Golf Course
Thematic: Irrigation with treated wastewater. Located just close a natural pound the golf course is irrigated, since its construction with treated wastewater.
Water quality standards.
Maintenance program.
Short round tour visiting is especial the irrigation lakes.
Wildlife.

Quinta da Ombria – Golf Course Construction
10:30h – Departure to Loulé – Quinta da Ombria
11:30-13:30h – Visit of Quinta da Ombria Resort (landscape and golf course projects).
Thematic: Construction of the Quinta da Ombria Golf Course. Project view; landscape; soil mobilization.
Beginning of a golf course construction.
Landscape restoration.

Algarelva – (sod farm)
16:00-17:30h – Visit to Algarelva
Thematic: Sod farm activity
Planting and maintenance programs.
Turfgrass products offer.

17:45h – Departure from Algarelva.
18:30h – Arrival at the Hotel

ETS important communication

1. ETS 2016 General Assembly

The ETS General Assembly (GA) will be held on **Tuesday 7th June at Algarve Congress Palace, at the Salgados Palace Hotel, Algarve, Albufeira (Portugal)**, during the 5th ETS Conference.

Very important ETS matters will be addressed during the GA and only ETS members registered before the 5th ETSC can partake and vote for:

- Election of the ETS Board (min. 5 max. 9 members, including President) that will lead ETS for the following 4 years
- Election of the ETS President
- Election of ETS Auditor General Board
- Approval of 2015 balance and 2016 budget
- Other important ETS strategies and polices

2. Candidature for new ETS Board and ETS President

All non-student ETS members worldwide are eligible for being elected within the Board or as President. As in 2012, with the election of Dr. Scott McElroy, one elected US member will be joining the ETS Board as "Liaison Officer for the US".

We are looking to have a list of candidates before the GA, in order to make the election process more speedy and efficient. Therefore, if you feel like getting involved in ETS, and would like to candidate for an ETS Board position and/or as ETS President and/or as Auditor, please send your candidature with a very brief profile (maximum 5-7 lines) to: etsoffice@turfgrasssociety.eu
Also attach, if you so wish, a small photo of yourself. Again, if you so wish, your candidature details will then be posted on the ETS website and in upcoming newsletters. So please let us know if you want your candidature publicized or not.

You will also be free to candidate yourselves onsite at the GA, however we feel that for ETS members it would be good to know who the candidates are beforehand.

Please do feel free to contact the European Turfgrass Society office (etsoffice@turfgrasssociety.eu) for any help, information and clarification on all these matters.

With kind regards,

ETS Office

www.turfgrasssociety.eu

EUROPEAN TURFGRASS SOCIETY

Red fescue management

Guidelines based on new research results and greenkeepers' experiences

by Maria Strandberg, STERF

Red fescue is a widespread native grass species in the temperate zone that probably dominated the first links courses on the British Isles where it resisted summer drought, play and very low inputs of fertiliser and water. In these times of promotion of sustainability and reduction of resource use, traditionalists use this as an argument for reintroducing red fescue.

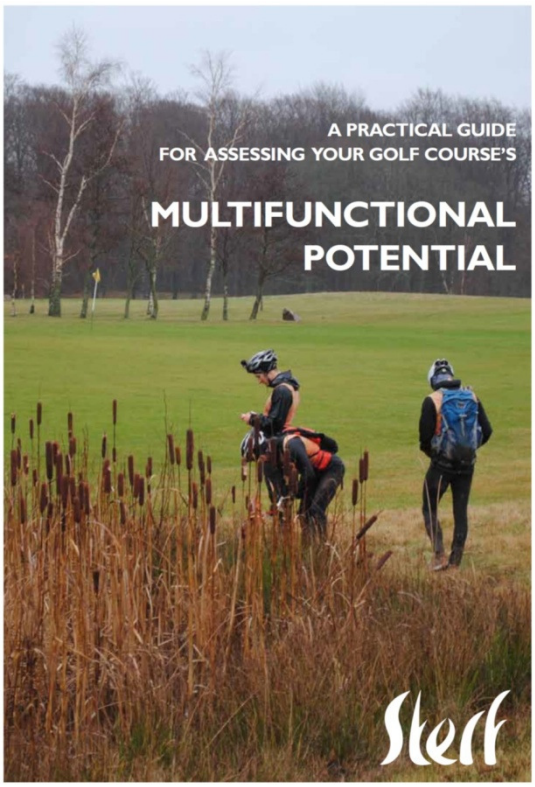
Increasing interest for more sustainable golf course management and also advocacy from golfers who want to play "the running game" are a part of the argument, but even stronger support has recently come from EU and national authorities who prohibit chemical pesticides and restrict the amount of water and nutrients that can be applied on golf courses.

Red fescue has proved to be a good alternative under these limitations, but it is not the only answer to the aforementioned challenges. Bent grasses (*Agrostis*sp.) can be managed with low input of fertiliser and water, and specific varieties have shown good resistance to disease. Traditionally red fescue has been seeded in a mixture with browntop bent (*Agrostiscapillaris*). Annual meadow-grass (*Poaannua*) is probably the only grass species that cannot successfully be grown on golf greens without access to chemicals.

STERF´s new handbook, Red fescue management is based on results from the research project"*FESCUE-GREEN: Best management of red fescue (Festuca rubra) golf greens for high sustainability and playability"*. The project started in 2011 and was concluded in 2015. The aim of the handbook is to present ready-to-use results and practical experiences that can contribute to more sustainable golf course management without compromising the quality of surfaces produced for the sport of golf.
The handbook and information about and reports from the research project can befound on the **www.sterf.org**

A practical guide for assessing the multifunctional potential of golf courses

by Maria Strandberg, STERF



We hope that this handbook will inspire golf facilities to take initiatives, work proactively and thus demonstrate the societal benefits of golf. The handbook is intended as a tool to visualize the multifunctional potential of golf facilities and to start the process of developing multifunctional values.

Golf courses are currently an underused multifunctional resource. If golf courses can be used in a more multifunctional way, a range of important services required by society can be supplied. In addition to offering a high quality arena for golf, courses can, for example, also contribute to improving biological diversity, conserving natural and cultural environments, and providing areas for recreation and outdoor life that are open to everyone. Many golf courses are currently experiencing financial problems and are trying to find new ways to maintain and expand their operations. Multifunctionality can provide an opportunity for alternative income, better anchoring within the community through work on environmental conservation and sustainable development, better collaboration and, in many cases, shared costs with authorities, environmental and leisure organisations and other sports clubs and societies. This, in turn, can lead to better public
opinion and greater political support.

This handbook presents a systematic process to create a multifunctional approach, and a tool for identifying multifunctional values and assessing possible benefits of multifunctionality at golf courses. There are three main steps that have to be considered in this process:
1. Discussion of the goals of developing a multifunctional approach, e.g., to attract new club members, to improve our relation to the local community, etc.
2. Description of the potential of the course by using the mapping tool.
3. Discussion with club members to identify what they want.

The handbook is based on a STERF research project – *Experience mapping and multifunctional golf course development - enhanced possibilities for increased and more varied use of golf courses*.
The goal of thefour-year project was to describe the development of a method for mapping and description of recreational experiences on golf courses. The objective was to provide a planning tool that can facilitate development of a broader multifunctional use of the golf course landscape.
The handbook can be found on: www.sterf.org

Dr. Scott McElroy took a turfgrass seminar @Pisa University (IT)

By Dr. Simone Magni

ETS Board member Dr. Scott McElroy from Auburn University took a seminar at Pisa University during his sabbatical period in Italy.
The seminar was taken on 22nd of March with the title "**The Increasing Problem of Herbicide Resistant Weeds: Global Problems and Turfgrass Issues**" and saw the participation of more than 50 attendees.

He talked about his State of origin, the resistance of plants to herbicides and the new methods of investigation for the characterization of both genetic structure and mutations occurring at molecular level.

You can read the presentation at:
https://issuu.com/europeanturfgrasssociety/docs/the_increasing_problem_of_herbicide

You can also find further information on Twitter: ***@malherbologist***

Turfgrass activity at Biotechnical Faculty (University of Ljubljana), Slovenia

By Dr. Stanislav Trdan

The Biotechnical Faculty is part of the University of Ljubljana founded in 1919 on the foundations of a long-established pedagogical tradition. With over 50,000 undergraduate and postgraduate students participating in more than 130 undegraduate and 130 postgraduate programs, it ranks among the biggest universities in the world scale. A total of 20 faculties, 3 art academies and 3 university colleges employ approximately 3,000 full-time university teaching staff.

The knowledge given to students about turfgrass management is only available in a Master Study Program Agronomy within an elective subject Lawns for Ornamental, Recreational and Sport Usage leaded by Matej Vidrih (Assistant Professor for field crop production and pasture management).

Until 2015 research activities in the field of turfgrass management were hardly performed. However, Stanislav Trdan (Full Professor for plant protection), a new ETS member and a head of the Chair of Phytomedicine, Agricultural Engineering, Crop Production, Pasture and Grassland Management (Dept. of Agronomy, Biotechnical Faculty) and his closest coworkers

Matej Vidrih, Žiga Laznik (Assistant Professor for plant protection), Jaka Rupnik (technical assistent) and student Miha Curk, performed first systematic turfgrass investigation on 20 soccer fields in different regions of Slovenia in which they studied soil compaction, sward cover, composition of turfgrass plants (grasses, legumes and herbs), common diseases, pests and weeds infestation and recognized the methods used in their maintenance and management.

management of turfgrass on soccer fields in Slovenia is still not on the satisfactory level.

An occasion for such research which results will be presented at 5th ETS Conference 2016 in Albufeira (PT) was given as a research idea which merges Dr. Trdan professional directions, a passion for football (all his three sons, Gašper U-15, Miha U-11 and Peter U-8 are training football in FC Domžale) and the fact that

"NEWS FROM ACROSS THE POND"

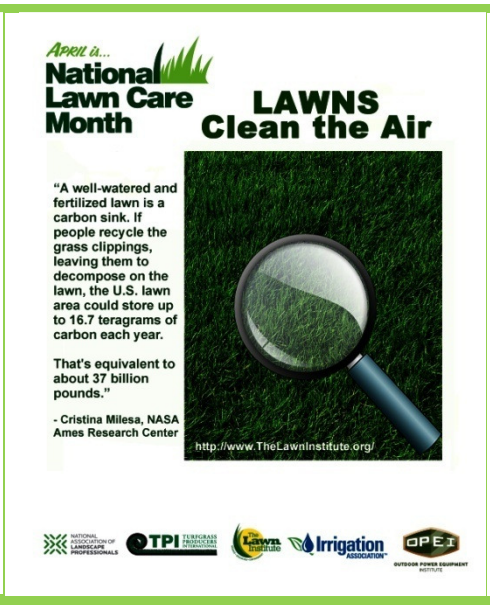
April was National Lawn Care Month in USA

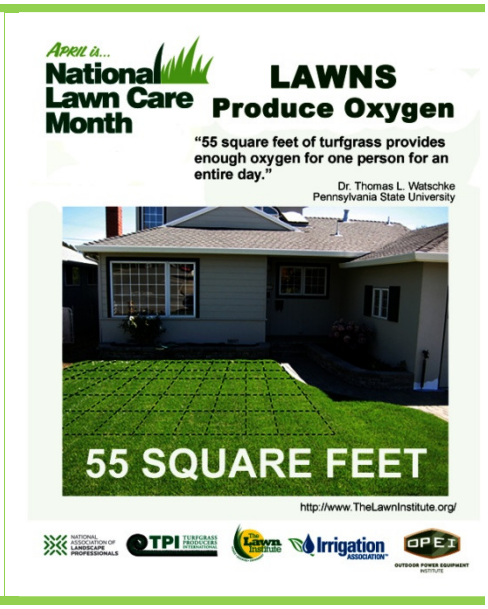
by Dr. Claudia de Bertoldi

In the United States, for the second year, the month of April was designated as National Lawn Care Month by **Turfgrass Producers International** (TPI) and **The Lawn Institute** (TLI) in partnership with the **National Association of Landscape Professionals** (NALP), in order to raise public awareness on the many environmental and health benefits of natural grass, which are too much often unknown by the population.

The objective of this venture was to promote lawn care, educate citizens and support turfgrass industry, providing important resources and suggestions that can be used by either professionals and turf-enthusiasts.

Europe should encourage as well the improvement of lawns and sports turf through research and education, so that turf professionals and researchers can transfer knowledge to reality, educate and disseminate expertise on the latest advances in turfgrass science, landscape, and agronomic science.





JOBS, JOBS, JOBS

Position with Labosport, a sports turf testing institute

General Manager Labosport US
Location : West Coast

You define and implement an ambitious development policy, including:
- The complete startup of the office, recruitment and installation of the team (2-3 people),
- The development of close relationships and/or partnerships with key sports Federations (NFL, MLB, NBA, NCAA,…), architects, sports turf managers and parks & facilities,
- The roll-out of Labosport service offer and expertise in the US.

You either own your testing company or can demonstrate an entrepreneurial spirit and have a successful experience of at least 10 years in the turf industry or related services.

We are looking for someone with excellent understanding of natural grass, hybrid and synthetic turf fields or sport surfaces in general. Dynamic, focused and independent, you are ready to take on a general manager position where you will have all levers to act on the business and will be accountable for the results of the subsidiary.
The location is preferably on the west coast (California), however, the job will require frequent travelling in the U.S and occasionally abroad.
We offer you to join a young a dynamic team, and to belong to our Group Committee , in a market with huge potential.
Job Type: Full-time
Required experience: Turf industry or Sport Science: 10 years
Required education: Master's
Please submit your application and references at **contact@labosport.com**
We will treat your application in full confidence.

Senior Agronomist USA position: attributes & skills required for the job:

10 year experience in turf management
Recognized high level agronomy expertise:
Recognized/known by peers groundsmen (references)
Accreditation such as CSTM is a plus
Publication / Presentations such as at STMA congress
Experience in building fields is a plus
Strong network with sports federations, college sports or equivalent
Entrepreneurship:
Passion for fieldwork / Go getter attitude (willingness to carry testing equipment)
Evidence of strong sales track record
Experience of company startup a plus
Ability to see challenges of the job, see beyond just the agronomy (sport surface science)
Good communication : written (reports)
Autonomy & capacity to work independently, set own targets
Willing to travel in the US
Willing to relocate to California is a plus
Salary : 50k$ depending on qualifications

LABOSPORT (www.labosport.com), French Group (100 employees, subsidiaries in 10 countries) is a world leader for athletics field testing, certification and technical consulting. We certify fields on behalf of national and international sports federations and leagues. We are on a fast growing market and are looking for an entrepreneur to startup/reinforce our operations in the US.

Graduate Research Assistantship, Turfgrass Science Kansas State University

Kansas State University is seeking a M.S. or Ph.D. student in the area of turfgrass science. The primary focus of the research will be drought stress and water conservation issues in turf. A portion of the research will involve small unmanned aircraft systems (drones) equipped with remote sensing instrumentation to detect drought and other stresses. Minimum requirements include a B.S. in Horticulture, Agronomy, Biological and Agricultural Engineering, or related plant science disciplines. The candidate must possess excellent written and oral English skills. Previous experience in turfgrass science or unmanned aircraft systems is preferred but not required. The student must be self-motivated, highly organized, and willing to work with a diverse group of faculty, staff, and students to conduct field, greenhouse, and laboratory research. Opportunities for teaching, outreach, and travel to professional meetings will also be available to the student. The stipend for graduate research assistants is $20,000 to $22,000 per year. This position is available June 2016. Please contact Dr. Dale Bremer (bremer@ksu.edu) for additional information. Information about acceptance into the graduate school at Kansas State University can be found at: http://www.k-state.edu/grad/.

Kansas State University is an equal opportunity employer and actively seeks diversity among its employees. Background check required.

Kansas State University is a land grant university with an enrollment of over 22,500. Manhattan, Kansas is a vibrant community with a population of approximately 56,000 located in the scenic Flint Hills, about 120 miles west of Kansas City.

Useful web sites to learn more about K-State and the city of Manhattan:

Kansas State University: www.ksu.edu
Department of Horticulture, Forestry and Recreation Resources: www.hfrr.ksu.edu
K-State Turfgrass Information: http://www.k-state.edu/turf/
City of Manhattan: www.ci.manhattan.ks.us

Open position at Osnabrueck University (German speaking)

This position is available until **May 12th**

Please find below the links with further information (in German):

https://www.hs-osnabrueck.de/de/stellenangebot/2016/04/professur-fuer-nachhaltiges-rasenmanagement-sustainable-turfgrass-management-teilzeit-05-fuer-5-ja/

https://www.hs-osnabrueck.de/fileadmin/Stellenangebote/Profs/HS-OS-Stellenausschreibung-AuL_239-P0416.pdf

Job position at Scotts Miracle-Gro Company

Job Description

The lawns product development team is looking for a thought leader in turfgrass research to advance our fertility program. The Senior Research Biologist in Turfgrass Science will conduct field, greenhouse and laboratory experiments on turfgrass fertility, establishment, water use efficiency, nutrient use efficiency and like environmental subjects. The Senior Research Biologist in Turfgrass Science should have broad knowledge in cool and warm season turfgrass management with familiarity of current and emerging turfgrass technologies. The Senior Research Biologist in Turfgrass Science will have a working knowledge of experimental design and protocol development. This position is a working scientist role directly conducting experiments with the assistance of other team members. The top candidate will be a person seeking the opportunity to develop into a future manager of people and project teams.

This position will report to the product development manager for Scotts branded lawns products in Marysville, OH. This position will be filled at either the Scientist or Senior Scientist level depending upon the successful candidate's qualifications.

Key Responsibilities

• Develop protocols to conduct scientific experimentation for field and greenhouse evaluations of turfgrass response to fertilizers, surfactants, nutrient stabilizers, etc.
• Drive innovation and future product development direction through interactions with industry experts, universities, sources of consumer insights and regional research station experts to understand new technologies, new biological research methods, consumer trends and regional differences.
• Scouting and testing new technologies, recommending and developing new products, creating product claims and identifying cost saving opportunities.
• Mining the realm of technologies and matching them to both articulated and unarticulated consumer needs to drive the business.
• Conduct statistical analysis of experiments and develop written scientific conclusions to experiments.
• Providing technical assistance to R&D, marketing, regulatory, sourcing, quality, legal and manufacturing when appropriate.
• Collaborating closely with colleagues in R&D, marketing, regulatory, sourcing, and manufacturing to ensure alignment on project goals, effective use of resources and explore innovation possibilities.
• Present research findings to executive leadership.
• Will lead/mentor Biology Specialists and Interns

Job Requirements

• Education: MS with experience in conducting biological research to commercialize turf products or technologies will be strongly considered with PhD preferred.
• Experience: 10 to 15 years. Hands-on field research experience with standard equipment and procedures.
• Product development / commercialization track record with an understanding of professional and consumer needs.
• Scientific curiosity, personal drive, ability to network and identify breakthrough technologies, product improvements and cutting-edge methods of research
• Demonstrated ability to design and lead research programs to answer specific questions and/or solve problems.

Knowledge & Skills

• Ability to use Microsoft Office (Excel, Word, PowerPoint), ARM, SAP.
• Working knowledge of statistics and statistical tools.
• Strong verbal and written communication skills to communicate effectively with key stakeholders to influence direction and enable decisions to make progress toward goals.

campus and at other research locations throughout the state. Tasks may include visual scouting of turf areas for biotic and abiotic stresses, identification of diseases using applicable techniques, and application of fertilizers, pesticides and other turfgrass chemicals. Position may involve ordering supplies and maintaining equipment. Detailed record keeping of all field activities will be necessary.

AGENDA OF TURFGRASS EVENTS

5th ETS Conference	5-8 Jun 2016	Albufeira (PT)	http://ets2016.ualg.pt
6th Conference on Landscape and Urban Horticulture	20-25 Jun 2016	Athens (GR)	www.luh2016.org
9th Int. Symposium on Molecular Breeding of Forage and Turf	15-19 Aug 2016	Lanzhou (PRC)	http://caoye.lzu.edu.cn/lzupage/B20100603055108.html
4th Biohydrology Conference	13-16 Sep 2016	Almeria (SP)	http://www.biohydrology2016.es
2nd ETP "Farm Tour"	29-30 Sep 2016	Ginosa (IT)	www.turfgrassproducers.eu
TPI International Education Conference & Field Day	20-23 Feb 2017	Tampa, FL (USA)	http://www.turfgrasssod.org

If you know of a turfgrass-related event which should be included in the Agenda of Turfgrass Events, please contact the ETS Newsletter Editor at **etsoffice@turfgrasssociety.eu** with all relevant details.

Edited by Claudia de Bertoldi PhD, etsoffice@turfgrasssociety.eu

Deadline for submission of material for 03/2016 edition: **July 15th**

The EUROPEAN TURFGRASS SOCIETY

The objectives of the **ETS** include the spread of innovative applications and encouragement of a holistic view of turf, particularly with respect to its influence on urban and environmental quality. This approach is significant as the founding members are representatives of a large industry that has global importance. We aim to:

a) Provide a forum for scientists, consultants, companies and practitioners to discuss technical issues related to the provision of turf surfaces.
b) Spread innovative applications for the benefit of the turfgrass industry, national and local government, and the European public. Encourage a systems-based approach to the study of turfgrass through multi-disciplinary groups working at different levels.
c) ETS considers turfgrass knowledge in the broadest sense, including its use in sport and leisure, its role in improving urban quality and its importance in the mitigation of environmental effects such as soil erosion.
d) Develop a strong ethos to promote sustainable, low input systems and solutions based on the conscious use of non-renewable resources.

Current ETS Board of Directors

Panayiotis Nektarios
Athens Agricultural University
ETS President

Dr. P.A. Nektarios has received his Ph.D. from Cornell University with an expertise on turfgrass management and its environmental impact. His vast experience on turfgrass science and culture is substantiated by more than 100 publications in impact factor journals, international and national conferences, university notes and daily press. He was the organizer/convener of the 1st and the co-convener of the 3rd International Conference on Turfgrass Management and Science for Sport Fields, under the auspices of International Society for Horticultural Science (ISHS) and the Editor of the corresponding Acta Horticulturae.
Since 2005 he is a Board Member of the International Turfgrass Society (ITS) and the Chairman of the Turfgrass Management Working Group of ISHS. He has served as co-editor and reviewer in several International and National Conferences focusing on turfgrass science and management. His expertise in turfgrasses has been commuted to younger student and scientists through teaching and experimentation at an undergraduate and postgraduate level at the Agricultural University of Athens.
He has been the coordinator and member of twenty granted research programs and a reviewer of more than thirty scientific journals and conference publications.

For further information visit:
www.aua.gr/nektarios

Stanislav Hejduk
BRNO Mendel University
ETS Board Member

Graduated and Ph.D. defended at Mendel University in Brno.
Currently working as an Associate Professor at Department of Animal Nutrition and Grassland Science of Mendel University.
First contact with Turfgrass management was during lectures of Professor Fratisek Bures in 1995. His background is grassland management and Forage production. He has been a board member of ETS since its foundation in 2007. Main area of interests in turf: soils, water x plant relationships, turfgrass strips in fruit orchards and in vineyards, plant stress, grass seeds multiplying. He co-operates in the area of education with the Czech Greenkeeper's Association.

For more information visit:
http://is.mendelu.cz/lide/clovek.pl?id=3042

Maria Strandberg
STERF - Scandinavian Turfgrass and Environmental Research Foundation
ETS Board Member

Maria Strandberg is Director of STERF, which is a leading International centre of expertise in sustainable golf course management. As a part of her job, Maria also has positions in Golf Environmental Organisation (GEO) Advisory Council and GEO Technical Commission, and on the International Turfgrass Society board.
Maria has a background a lecturer and director of studies at the Swedish University of Agricultural Sciences. Maria has more ten years of experience in working with scientific issues regarding all aspects of high quality, and environmental and economic sustainability of managed turfgrass areas and golf facilities.
In 2008 Maria received an award from the King of Sweden for her national and international work on integrating golf and environment and in 2011 she received the Golf Environment Organization Environmental Award for her significant contribution to sustainable golf.

For more information please visit:
http://sterf.golf.se

Scott McElroy
Auburn University
ETS Board Member

Scott McElroy is an Associate Professor in the Department of Agronomy and Soils at Auburn University. He received his BA in Communication with an emphasis in Chemistry from Auburn University, his MS from the Auburn University in Agronomy and Soils and his PhD from the NC State University in Crop Science with a minor in Plant Ecology. Dr. McElroy was previously employed as an Assistant Professor and Extension Specialist in Turfgrass and Weed Science at the University of Tennessee in Knoxville, Tennessee. His primary research area at Auburn is on new and improved methods for improved weed management in turfgrass systems, from golf course putting greens to turfgrass sod production to home lawns. Dr. McElroy holds a joint appointment with the Agricultural Experiment Station and the College of Agriculture. He also serves as a reviewer for the Weed Science Society of America Journal, Weed Technology, and the Agronomy and Crop Science Societies of America Journals, Agronomy Journal and Crop Science, and is a member of the American Chemical Society and American Association for the Advancement of Science. Dr. McElroy teaches two classes, Principles of Weed Science (AGRN 3120) and Applied Weed Science Technology (AGRN 5200/6200). Dr. McElroy is currently developing a third class, Sports Turf Management, for both undergraduate and graduate students.

For more information visit:
http://www.ag.auburn.edu/agrn/faculty/McElroy/

Trygve S. Aamlid
Bioforsk
ETS Board Member

M.Sc in Crop Science 1986.
Ph.D. in Plant Physiology / Seed production 1990.
Sabbaticals at Oregon State University (1991) and at PennState University (2005/06). Since 1990 employed by The Norwegian Institute for Agricultural and Environmental Research (Bioforsk) with Bioforsk Øst Landvik as working place. Qualified as professor 1999.
Since 2002 leader of Bioforsk's research group for turfgrass and seed production. Experience from numerous projects in turfgrass physiology, seed physiology, seed production, plant breeding, variety testing and ecological restoration / revegetation. About 60 papers in peer-reviewed international journals and conference reports. More than 400 popular articles.
Lecturer at the Agricultural University of Sweden, Norwegian University of Life Science and several meetings and courses held by the national golf unions and greenkeepers' associations in the Nordic countries. Supervisor for Ph.D. students Lars Havstad, Ingunn Vågen and Tanja Espevig. Since 2006 scientific representative and vice chairman and on the Board of Scandinavian Turfgrass and Research Foundation, since 2009 on the Board of directors of the International Turfgrass Society and since 2012 on the Board of European Turfgrass Society.

For more information visit: www.bioforsk.no

Wolfgang Praemassing
DEULA
ETS Board Member

Study of Agricultural Biology (University Diploma) at University of Hohenheim, 1991 Doctoral Dissertation (PhD) Promotion with Prof. Dr. H. Franken, University of Bonn, subject: Soil physical Effects of Aeration on Turfgrass Soils, 2008.
Occupation and activities: Agronomist and lecturer in Greenkeeper Education and Training for golf and sport sites at DEULA Rheinland GmbH, Education Center, Kempen. Member of editorial staff of "European Journal of Turfgrass Science". Member of expert committee of German Soccer League (DFL). Member of working group "Turf" at German Soccer Federation" (DFB). Member of working group "Water" at German Golf Federation. Member of board of directors "International Turfgrass Society" (ITS). Member of examination boards of Chamber of Agriculture Nordrhein-Westfalen Golf Course Greenkeeper and Head-Greenkeeper, Greekeeper/Groundsmen Sport Sites, Competence of Pesticide application.

For more information visit: www.deula.de

Filippo Lulli
Turf Europe
ETS Secretary and Treasurer

I am a University of Pisa graduate and PhD in Crop Science. I have been a member of the Centre for Research on Turfgrass for Environment and Sports since 2003. In 2009 I founded Turf Europe, a University of Pisa Spinoff company dedicated to turfgrass consultancy, teaching and R&D. I have been a member of ETS since its foundation and have always tried to be active and involved in all ETS events. I have written over 15 scientific articles on turfgrass and my main research areas are sports turf establishment and management, warm-season turfgrass species characteristics and physiology, precision farming applied to turfgrass..

For more information visit: www.turfeurope.eu

Ulrike Pitha
BOKU University, Vienna
ETS Board Member

Born 1976 in Moedling/Austria, studied Landscape architecture and Landscape planning at the University of Natural Resources and Life Sciences Vienna. She wrote her master thesis at the institute of Soil Bioengineering and Landscape Construction (IBLB) about Gravel paths in historical gardens and her PhD thesis about wheelchair use in urban parks. Since 2006 she is leader of the vegetation technology research group of the IBLB.

Postdoc researcher, assistant at University of Natural Resources and Life Sciences, Vienna – Department of Structural Engineering and Natural Hazards – Institute of Soil Bioengineering and Landscape Construction.
Group leader of the division 'Vegetation techniques', project management and research activities of national and international projects, lectures on specific vegetation techniques issues.
Expertise: vegetation technology; biometry of plants; microclimatic effects of plants; Plants for urban areas.

Appointments/Memberships in Professional Societies
2013 -2016 International Turfgrass Society advisor
2012 -2016 European Turfgrass Society consultant, then full Board Member
2011 - Austrian Standards Institute, Arbeitsgruppe 229.10 "Begrünung mit Wildpflanzensaatgut" field specialist.

For more info visit:
http://forschung.boku.ac.at/fis/suchen.person_uebersicht?sprache_in=en&ansicht_in=&menue_id_in=101&id_in=3428

EUROPEAN TURFGRASS SOCIETY

ETS 2016-2017 CAMPAIGN Two years membership

REGISTRATION FORM (print, fill-in, scan and send by e-mail to: etsoffice@turfgrasssociety.eu)

FEES:

- ☐ PRIVATE € 153,00
- ☐ STUDENT € 51,00

COMPANY:

- ☐ with turnover < 500.000€ : € 340 - includes 2 individual memberships
- ☐ with turnover < 5.000.000€: € 510 - includes 3 individual memberships
- ☐ with turnover < 25.000.000€: € 680 - includes 4 individual memberships
- ☐ with turnover > 25.000.000€: € 1020 - includes 5 individual memberships
- ☐ Public organizations and Institutions: € 340 - includes 2 individual memberships
- ☐ Additional individual memberships (companies, institutions, associations): € 85

Password (8 characters) : Choose the password

Organization

(for private) family name

(for private) first name

Address

City

ZIP code

State o province

Country

Vat code or Fiscal code

Contact person

Contact person e-mail

Payment details:

☐ Payment by bank transfer: Banca Monte dei Paschi di Siena – Livorno Ag. 8
IBAN CODE: **IT 08 X 01030 13905 00000 2125169** – BIC code **PASCITM1W99**

☐ Payment by Paypal with Credit Card (ETS will send you a "request of payment" by Paypal)

Member 1 info:

*First name

*Family Name

*Date of birth (dd/mm/yyyy)

*Birthplace (city, state, nation)

*Codice Fiscale (only for Italian people)

*E-mail

*Address

*City

*Zip

State

*Country

Telephone

Member 2 info

*First name

*Family Name

*Date of birth (dd/mm/yyyy)

*Birthplace (city, state, nation)

*Codice Fiscale (only for Italian people)

*E-mail

*Address

*City

*Zip

State

*Country

Telephone

For additional members print and fill-in this page again and add to the form.