International Turfgrass

The Newsletter of the International Turfgrass Society

January 2023

An introduction be the new International Turfgrass Society President

By Hideaki Tonogi, ITS President, Japan

Greetings, my name is Hideaki Tonogi, and I have just assumed the position as President of the International Turfgrass Society.

I am currently preparing for the 15th International Turfgrass Research Conference in 2025, which will be the second conference in Japan since the first one in 1989, as the chair of the Conference Steering Committee. The conference will be held in Karuizawa, two hours west of Tokyo by high-speed train in a mountainous region that is famous not only in Japan but also world-wide as a resort with cooler weather in the summertime. As well, we are preparing for the conference by taking all possible measures to prevent the spread of COVID-19.

Please let me briefly introduce my background. I was born and raised in Fuji City, Shizuoka Prefecture, at the foot of Mt. Fuji City, at a time when there was great uproar over water pollution. I grew up being aware of the term "environmental improvement" since my childhood. Later, I studied environmental greening at Chiba University.

I hope everyone had an enjoyable and safe holiday season. I recently came across a review published on-line about a new book that features "Remarkable Football Grounds" by Ryan Herman, it is a collection of some of the most unique places to watch and play football around the world. It also discusses the culture of "groundhopping" surrounding these events. In the US, it sounds very similar to "tail-gating". Some of you may enjoy the publication. The book is currently available for purchase in the UK/Europe from Pavilion Books. It will then be available in the US later this month.

If you have any newsworthy stories or other information such as employment opportunities for readers of International Turfgrass, I hope you will consider submitting an article for the next newsletter by April 15, 2023.

I hope you enjoy the very good articles in this edition.

Sincerely,

Nathan R. Walker



Hideaki Tonogi, President of the International Turfgrass Society.

When I was a university student, I wanted to work in turfgrass. I also wanted to learn practical work at a golf course, which has the highest management standards in turfgrass management, so I worked at a golf course in Shizuoka Prefecture and gained practical experience to become a superintendent.

Continued on next page

In this Edition

- An introduction be the new International Turfgrass Society President
- 2022 Japanese Society of Turfgrass Science Annual Meeting
- 2022 Japanese Society of Turfgrass Science fall Meeting
- Let's work together to make our golf courses a fantastic experience
- Why become an ITS Member?
- ITS Membership Application
- ITS Board Members

 \longrightarrow

Click here to join ITS



During my third year, I participated in a tour to the U.S. organized by a golf course industry group, where I visited the research facility of Dr. James B. Beard. I was greatly impressed with this research facility and other things I saw on the tour. After returning to Japan, I changed jobs, and then studied at Texas A&M University under Dr. Beard as a visiting student in 1988.

Before going abroad, I learned that the International Turfgrass Research Conference would be held in Japan for the first time in 1989, and I vividly remember returning temporarily and proudly to Japan to attend the ITRC 1989. At the end of 1989, I permanently returned to Japan and worked for several turfgrass-related companies. In 2008, I accepted a position as an adjunct professor at Chiba University, where I continue to teach an intensive summer course every two years on turfgrass management to a total of more than 300 students.

As the 15th President of the International Turfgrass Society (which incidentally was founded by Dr. Beard), I feel the honor and importance of this position and intend to successfully hold the second International Turfgrass Research Conference in Japan, the first in 36 years, to connect it to the next generation of turfgrass scientists. I continue to strive daily to instill a turfgrass culture in Japanese society.

Now, in light of the recent world events, we need to improve our thinking on a large scale, especially with regards to sustainable development goals (SDGs). The turfgrass science and management fields are also facing major pressures to shift from traditional and conventional management methods. In Japan, we are 100% dependent on the outside world for phosphorus and potassium resources, and we also have a serious problem of mowing waste and other waste disposal. From this perspective, we are facing

the problem of how to solve this problem by making better use of biostimulants, some of which have been introduced recently, instead of just continuing to use conventional management methods.

At the 2025 Conference, we expect to present research results on turfgrass varieties, fertilizer management, and disease and pest management, and to continue the SDG theme of the 2022 Conference in Copenhagen. Because Japan spans both cool and warm season regions from the snow-covered regions of Hokkaido Island to the tropical environment of Okinawa, we hope you have the opportunity to explore these regions both in your travels and during this conference. Furthermore, in Japan, turfgrass as part of the environmental aesthetic provides people with a sense of contentment and relaxation, and although scientific data is difficult to measure precisely on contentment, turfgrass is thought to provide nourishment for the soul that benefits our daily lives.

In this sense, we hope that this year's ITRC2025 will not be limited only to the field of natural science but will be a conference where research results related to all aspects of turfgrass science will be presented to participants from around the world.

We look forward to welcoming a large number of participants from around the world to the 15th Congress, and hope you will not miss the July 12-16, 2025, meeting to make it a productive and enjoyable one.

Sincerely, Hideaki Tonogi President International Turfgrass Society

2022 Japanese Society of Turfgrass Science Annual Meeting (Online)

By Shin Nakamura, Masakazu Ushilo, Shoichi Kimura, Kunitsugu Ogawa, Satoru Tanaka, and Hideaki Tonogi

International relations committee, Japanese Society of Turfgrass Science

Focus group meeting and 50th anniversary event

The 2022 Japanese Society of Turfgrass Science (JSTS) Annual meeting was held on an online platform with around 150 participants on June 11 and 12, 2022. In the morning of the first day, we held four focus group meetings steering golf course

management, ground cover plants, park management and school yard maintenance. In the afternoon, we had the 50th anniversary event. As a first speaker, Mr. Yaguchi gave a detailed review of the history of the Japanese Society of Turfgrass Science (JSTS) over

the past 50 years (Fig. 1). Mr. Ushiki told us the story of how golf course management had developed. The



Figure. 1 The footsteps of Science (JSTS) over the past 50 years by Mr. Yaguchi.

first golf course was constructed in Kobe in 1901(Fig. 2). The Hodogaya Country Club, opened in 1922, was where Bordeaux mixture, mercury fungicide, etc, first started to be applied to control brown patch.

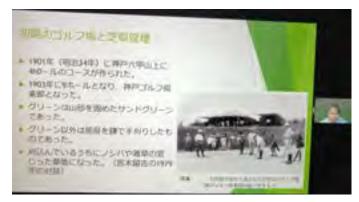


Figure. 2 The history of golf course in Japan by Mr. Ushiki.

In 1972, the Turf Science Research Group was organized to focus on research into turfgrass. At that time, webworm and large patches dominated as the problematic pests on golf courses. In 1984, the Japanese Society of Turfgrass Science was established from the Turf Science Research Group. Along with the rapid growth in the economy, called the "Bubble time" in Japan, turf research became more popular, with significant advances being made, while at the same time a large number of new golf courses were being constructed in Japan. The subsequent economic recession in the 1990's led to golf course management budgets being restricted at many golf courses. In the 2000's, Bermudagrass started to be introduced to the putting greens. The 4th and 5th generations of bentgrass were also imported and began to be used. Herbicideresistant weeds became apparent. Since then, we have had to look carefully at how all our research data could be used to improve turf management in the future. Dr. Mizuniwa introduced the latest progress in park greening research at JSTS. Dr. Fujisaki presented the activity for school yard greening. Dr. Iijima gave a presentation about the introduction and use of ground cover plants up to today. In 2020, regulations for rooftop greening were implemented. Several greening initiatives and constructions have been carried out since Expo 2005 Aichi demonstrated the greening technology. The urban greening effect on climate change, global warming, natural disasters, human activity, mental health, etc, should be more actively taken into consideration from now on. At the final panel discussion, we underlined the path forward for the JSTS. For example, from the point of view of pest and weed-pest control, there are plans to develop a monitoring kit to measure the resistance of weeds to herbicides. The research on regeneration from cut plants of Poa annua will be addressed to achieve effective weed management. In consideration of the 2050 carbon neutral target, mowed turf plants should be composted rather than disposed of as waste.

Oral presentations

On day two, 16 oral research presentations were introduced from public and private research institutes.

Some research studies are related to the carbon footprint on golf courses. One presentation by Dr. Watarai from Kobe Gakuin University showed the possibility of carbon offsetting strategies. The CO₂ accumulation on a golf course will be valued as 8,000 JPY/t CO₂. In consideration of the preparation and process cost for the evidence, the 5900 K JPY/ year would be considered as a carbon offset credit. Dr. Yamamoto at SoftBank corp. introduced the model to estimate the CO₂ absorption. The estimated CO₂ data can be used for effective turf maintenance in the future.

Regarding synthesized pesticides, following three kinds of molecules were introduced: Kasugamycin (FRAC24), well known to control Rice Blast, can manage bacterial disease, as reported by Mr. Hotta from Rikegreen Co., Ltd. with P. syringae in putting green bentgrass; a new insecticide, broflanilide, categorized as IRAC 30 (GABA-gated chloride-channel allosteric modulators), which can kill a variety of pests, including Lepidoptera and Coleoptera mainly through the intake of the chemical by the insects (its activity on S. depravata was sustained for longer than one month in the field); and Mr. Miura from Maruwa Biochemical Co., Ltd. showed how to control the hard-to-kill weed,

Lespedeza striata, verifying that suitable timing of the application of an SU herbicide like metosulfuron-Me to reduce the population over the years would be the beginning of flowering in *L. striata*, with this finding being unique based on our common understanding

that herbicide should be applied at pre to early post for better control.

Our 2022 fall meeting online took place in Shizuoka (next article).

2022 Japanese Society of Turfgrass Science Fall Conference (Online)

By Shin Nakamura, Masakazu Ushilo, Shoichi Kimura, Kunitsugu Ogawa, Satoru Tanaka, and Hideaki Tonogi

International relations committee, Japanese Society of Turfgrass Science

The Japanese Society of Turfgrass Science (JSTS) held its online fall conference with around 100 participants on November 12 and 13, 2022. The main venue and organizers were based in Shizuoka, in which the highest mountain in Japan, Mr. Fuji located. The prefecture hosted the conference for the first time in 21 years.

During Day 1, a symposium took place under the theme of "Shizuoka - New diversity of turf use in 21st century". The session kicked off with an opening address by the conference chairperson, Prof. Katayama and the JSTS president, Prof. Takahashi. The sessions started with multiple businesses and turfgrass utilization managed by a golf course company, "Shizuoka Country Group", followed by several presentations on topics such as the turfgrass culture fostered by Shizuoka prefecture, the practice of using goats to mow lawns, footgolf & SNAG (Starting New At Golf) golf, and the upside of turfgrass establishment in baseball. In addition to the oral presentations, virtual tours were simultaneously held focusing on the turfgrass garden with scenic view of Mr. Fuji produced by Nihondaira Hotel (Fig. 1), a visit to the Shizuoka Research Institute, unmanned lawnmower practices and a demonstration of footgolf.

2022年日本芝草学会秋季大会シンボジウム 静岡・21世紀の芝生の多様化 静岡カントリーグループの取り組み

Figure 1. Presentation by a golf course company, "Shizuoka Country Group".

In a session by Shizuoka Country Group, they explained how to utilize turfgrass in order to attract various generations and encourage interactions between them. The wide range of activities – not only golf but also soccer, footgolf, SNAG golf, and several events on professionally maintained lawns – definitely support local society. Shizuoka prefecture has been implementing the turf culture promotional project since 2012. The local turfgrass research institute and "Green Bank" have been financially and technically supporting turfgrass establishment to increase the amount of public or school ground covered by lawns to 11,770 square meters in 2021 from 2,931 in 2011. For maintenance purposes, unmanned lawnmowers have been recently introduced on a trial basis. In an online field tour session, Shizuoka turfgrass institute offered the live stream of St. Augustine turfgrass cultivation with detailed research data. The turfgrass can grow even under shared conditions, which shows the potential to propagate the species across Shizuoka and other regions in Japan.

On Day 2, three focus group workshops were organized to look into ground cover plants & parks, school yard maintenance and golf course management, respectively, to exchange opinions and discuss recent research activities.

At the ground cover plants & parks workshop, the main theme was utilization of vacant land in cities and the implementation of phytoremediation to clean up polluted fields. Tokyo City University presented some of the best practices in green and sustainable remediation in the US, UK, Australia and Japan. The establishment of community gardens in abandoned or vacant fields in Berlin, Leipzig and London was also explained. They undoubtedly contribute both to a sustainable society and the renovation of green space in densely populated cities. In addition, three urban

farming examples in Japan were also discussed. The detailed studies in phytoremediation also showed that Pb can be removed from a contaminated field by raising weeds such as *Chenopodium album*,

Kalanchoe pinnata, and Artemisia indica.

The next JSTS annual conference is scheduled to take place in Yokohama on June 10 to 12, 2023.

Let's work together to make our golf courses a fantastic experience By Sue de Zwart, Talking Turf, South Africa

I love the passion & enthusiasm we have as golfers & maintenance teams in South Africa & around the world.

One of the best things I introduced as superintendent at Leopard Creek was "member course orientation" – honestly, it took now more than 5 minutes from my side & invariably the member had numerous questions.

Prior to this I would meet a new member when asking them to please not drive their golf cart up tee banks, green surrounds, or bunker edges. Cart traffic/compaction is a killer. You will notice all your goose grass infestation is typically in highly compact areas.



Blair Atholl Golf and Equestrian Estate, 5rd Hole, South Africa

Let us work together – if golfers stay on the cart path & enter the turf opposite their ball this already saves turf significantly.

No go zones – which are thankfully managed by the cart GPS system at many clubs – tee banks, bunker edges – no need to park closer than ten metres to a bunker – 5 if you really have poor mobility.

As members & golf course maintenance staff let us set the example of where to drive. Drive where the turf is happy – avoid compact, wet, undulated areas.

Summer is a fantastic time for the club – great



St. Fraincis Bay Golf, 18th Hole, South Africa

to see the pro shop, bar & restaurant buzzing. We all want to produce your ultimate playing surface at your club, but it certainly takes two to tango.

The best time to do the course maintenance is nice & early while the plant is happy, stomata (breathing holes) are open to receive water, nutrition & fungicide applications. An early morning moisture & disease check on greens is imperative. I love having an assistant or supervisor on each nine doing the course set up, walking the greens & taking responsibility for the teams' productivity.



Gary Player Country Club, 5th Hole, South Africa

Summer check points:

1. Moisture – water early morning or behind the last play in the afternoon – a weather station linked to your irrigation system is a vital tool. This will give you your daily ET which will typically vary between 4mm – 9mm depending on the heat &

- wind. We would typically replace 75 % of ET on fairways. Your irrigation will determine your playing surface quality.
- 2. Drainage ensure your day lights are draining I often come across a day light under water if your green cannot drain you will develop algae, disease, turf thinning & a slippery slope to an extremely poor playing surface over a period.
- 3. Dusting I love a light dusting every 21 days this not only protects the crown of the plant but

- produces a nice firm playing surface.
- 4. PLAN (annual soil testing, spring & autumn treatment, staff training) DO (follow a sound nutrition, IPM & wetting agent programme) REVIEW (we zero base programmes on an annual basis) RECORD (soil temp records & pest scouting maps)
- 5. DETAIL this is what set's the good apart from the great.



Select the logo above to visit the 15th ITRC website



INTERNATIONAL TURFGRASS SOCIETY

Exchanging Turfgrass Knowledge Worldwide

The International Turfgrass Society (ITS) is a not-for-profit scientific organization that encourages research and education in turfgrass science.

ITS was established in 1969 and promotes communication among international turfgrass researchers by organizing international conferences on turfgrass research and all phases of turfgrass production and use.

International Turfgrass Research Conferences (ITRC) are held at 4-year intervals and the next ITRC will be held in Japan in July 2025.

ITS membership is a 4-year subscription (2022-2025) and includes the following benefits:

- copy of the ITS Research Journal from the next ITRC
- discounts for ITRC registration
- back issues of the ITRC Proceedings and Journal articles.
- access to the Members Only section of the ITS website
- subscription to the ITS Newsletter

Join ITS and ensure your discount for ITRC2025 Japan
Standard subscription fee is 325 USD – Student discounts apply
Please download the membership application form from the
ITS homepage turfsociety.com



INTERNATIONAL TURFGRASS SOCIETY MEMBERSHIP/PAYMENT OF DUES



Please Use Autofill:

Name: Affiliation:

Address:

City: State:

Postal Code: Country:

Phone: Fax:

E-Mail:

PLEASE CHECK MEMBERSHIP TYPE DESIRED:

Regular Membership Fee (2022-2025) \$325.00 USD

Sustaining Membership Fee (2022-2025) \$1000.00 USD

Student Membership Fee (2022-2025) \$150.00 USD*

Retired Membership Fee (2022-2025) \$25.00 USD

PLEASE INDICATE METHOD OF PAYMENT:

Check** PayPal

Bank Wire Transfer, please contact Scott McElroy jsm0010@auburn.edu for instructions & account information

- * Student member must have confirmation letter from major faculty advisor.
- ** To avoid heavy collection fees, only checks from U.S. affiliated banks will be accepted. Please make check payable to: *International Turfgrass Society*.

MAIL OR E-MAIL THIS COMPLETED FORM, ALONG WITH 1) YOUR CHECK OR 2) YOUR PAYPAL INFORMATION OR 3) THE WIRE TRANSFER INFORMATION TO:

Scott McElroy Auburn University 233B Funchess Hall Auburn, AL 36849 USA

Email: jsm0010@auburn.edu

Check here, if you do not want your information to be listed on the ITS Website or Newsletter.

ITS Board Members 2022 - 2025

Officers

President

Hideaki Tonogi Chiba University H-310, 3-1 Kotesashi-cho Tokorozawa, Saitama

Japan

Tel: +81-90-1268-6937 tonogi1234@jcom.home.ne.jp

Treasurer

Scott McElroy Auburn University 233B Funchess Hall Auburn, AL 36849 **USA**

Tel: +1 334 844-3992 jsm0010@auburn.edu

Past President

Maria Strandberg STERF (Scandinavian Turfgrass & Environment Research Foundation) P.O. Box 11016, SE-11016 Stockholm

Sweden Tel: +46 (8) 622 15 27 maria.strandber@golf.se

Newsletter Editor

Nathan R. Walker

Department of Entomology and Plant Pathology

Oklahoma State University Stillwater, OK 74078 Tel: +1 405 744 6830 nathan.walker@okstate.edu

Vice-President

Ruth Mann Agrii Throws Farm Dunmow, CM6 3AQ

Tel: +44 (0)7767392442 ruth.mann@agrii.co.uk

Secretary

Jim Murphy **Rutgers University** Dept of Plant Biology New Brunswick, NJ 08901

USA

Tel: +1 848 932 6326 jamurphy@njaes.rutgers.edu

Journal Editor-in-Chief

Doug Soldat University of Wisconsin 245 King Hall 1525 Observatory Drive Madison, WI 53706 +1 608 263 3631 djsoldat@wisc.edu

Historian

Alessandro De Luca Italian Golf Federation - Green Section Via Montecchia, 22a 35030 Selvazzano Dentro - Padua

tel. +39 348 4150248 adeluca@federgolf.it

President- Elect Katerina Jordan

University of Guelph 4214 ECB Edmund C. Bovey Building Guelph Turfgrass Institute Tel: +1 519 824 4120 x56615 kjordan@uoguelph.ca

Website Editor

Tom Hsiang University of Guelph **Environmental Sciences** Guelph, Ontario N1G 2W1 Canada

Tel: +1 519 824 4120 ex. 52753

thsiang@uoguelph.ca



Directors

Australia: Christopher Lambrides

China: Yan Sun USA: John Kaminski

New Zealand: Guilherme Barcellos Spain: Sara Dalmau

Austria: Wilhelm Graiss

Denmark: Anne-Matte Jensen France: Stephen Alderton South Africa: Sue De Zwart South Korea: San-Kook Lee

Argentina: Maria Alejandra Blanco

Japan: Shin Nakamura USA: Kelly Kopp

Germany: Bernd Leinauer



Visit the ITS Website here

Become a member here

Please send comments, feedback, and turfgrass news articles for future issues to the newsletter editor. If you know any non-members, new faculty, staff, and new personnel involved in turfgrass research who might be interested in joining ITS please forward their e-mail address to the newsletter editor and they will also receive the Triannual issues of International Turfgrass.

The deadline for submissions for the next newsletter is April 15, 2023