Recently, the Department held its first New Frontiers Symposium, which was a direct outcome of our strategic plan. We heard various ideas about future opportunities in agricultural research and important issues that not only affect Ontario but also the whole planet. One important message was that many of the problems facing the world, such as population growth, climate change or the price and diminishing availability of oil, are now presenting tremendous opportunities for us in Plant Agriculture.

Within our Department we are engaged in areas such as bioproducts and biofuels. Many disciplines in which we have been and will continue to be active, such as genetics and breeding, can contribute to the challenge of producing more food on less land than we are currently able to achieve. In addition to food supply, many in Plant Agriculture are working to enhance human health components of the food we produce. Through the advancements we make, the Department remains an important part of the University, Province and society.

Despite the negativity on campus surrounding budget issues, Plant Agriculture has the intellectual capital required to make a difference in agriculture, both locally and internationally, in a wide range of areas. As a Department, it is also important that we continue to develop an intellectual culture where we all can learn and develop new ideas to meet future research challenges. The New Frontiers Symposium was meant to contribute to this culture. Our winter Departmental seminar series and retreat are important as well.

With the start of the fall semester, fresh faces appear in our Department. New people, our new graduate students, bring unique ideas and perspectives and they play an important part in the growth and development of an academic unit. Because our graduate students are also the next generation of scientists to solve society’s ever-changing problems, it is important that our graduate program facilitates the development of broad-based thinkers through a culture of exchanging ideas and learning beyond one’s own focused research project. I hope to work with the Graduate Committee in the coming months to continue enhancement of the grad program to further enrich our Department.

As you are aware, Rene van Acker became Associate Dean and I became Acting Chair on September 1. Although the Department has lost an excellent Chair, we will still benefit from Rene’s activities as he focuses to develop solutions to the financial problems facing our Department and others in the College. Plant Agriculture will benefit from having the newly created position of Associate Dean-External.

I would like to thank everyone in the Department for their support of my position. As Acting Chair, I realize we cannot stand still until a five-year appointment is made. Your contributions to the improvement and enrichment of Plant Agriculture are much appreciated.
Welcome to
Stephanie Bach, M.Sc. (A. Sullivan)
Binurani Kalita, M.Sc. (A. Mohanty)
Robert Bruce, M. Sc. (L. Lukens)
Jessica Davenport, M.Sc. (D. Falk)
Hema Kasinathan, M.Sc. (M.R. McDonald)
Ann Meyer, M.Sc. (L. Lukens)
Jerlene Nessia, M.Sc. (P. Pauls)
Kendra Sauerteig, M.Sc. (J. Cline)
Patrick Schwieder, M.Sc. (K. Jordan)
Cynthia Siva, M.Sc. (K. Jordan)
Scott White, Ph.D. (R. Van Acker)

A warm welcome to all of our new graduate students, we hope your time in Plant Agriculture proves to be very enjoyable, rewarding and quite a bit of fun as well.

We are also pleased to welcome 2 visiting graduate students: Hanny Elsadr with Peter Pauls and Mette Sonderskov with Clarence Swanton, we hope you enjoy your time with us.

Graduate Student News

Congratulations to Chanli Hu, a graduate student with Mary Ruth McDonald for her cover girl status in the September 8 issue of Ontario Farmer. This photo was taken at a recent field day, Chanli was displaying potatoes with increased antioxidants.

Presentations


McNaughton, AJM, Ablett, GR, Rajcan, I. "Evaluation of genes encoding the enzymes of the Kennedy Pathway in soybeans (Glycine max (L.) Merr) with altered fatty acid profiles” CSSS/CSA/CSAFM Joint Annual Conference, August 5-7, 2009, Guelph, ON (poster)

McNaughton, AJM, Ablett, GR, Rajcan, I. "Evaluation of genes encoding the enzymes of the Kennedy Pathway in soybeans (Glycine max (L.) Merr) with altered fatty acid profiles” World Soybean Research Conference VIII, August 10-15, 2009, Beijing, China (oral)
I was born in a remote village in my beautiful country of Nepal. The most spectacular thing of my country is you can see mountains from most of the places.

I am the first child in my five-member family. My father is in government service and my mother is an adorable housewife who always keeps our family cheering. Throughout my childhood and adolescence I played a number of different sports including volleyball, badminton and table tennis.

When I finished high school, I started studying Science. I completed my master degree in Botany with majoring in Ecology and Taxonomy. In 2002, I got married and went to stay in Germany with my husband. After two years in Germany we came to Canada in 2005. My husband joined the Department of Plant Agriculture as a Master student and I stayed at home. In 2006, I was blessed with our beautiful daughter, Kinjal.

Since January 2009, I am doing my Master Degree on dry beans with Dr. Alireza Navabi and Dr. Peter Pauls. I am working on a research question: “Is it possible to improve folate content in bean through breeding?”

In my spare time, I love to do gardening, cooking and listening to music.

I was born and raised in a small village in Nepal. I am from a farming family. We grow rice, wheat, maize, and mustard in our farm. So, unknowingly I started to learn about crop plants from my childhood. I did my undergraduate degree in agriculture where I started to learn about crop plants in detail. I worked as a crop development officer in remote areas of Nepal where I learn how to communicate and exchange information with rural farmers.

In 2003, I got an opportunity to pursue my master's degree in agriculture from the University of Bonn, Germany with financial support from the German Academic Exchange Service (DAAD). Before leaving my country for further education I got married and both of us went to Germany. During my master’s degree I studied how varying temperature affects growth and development of rice.

After completing my master degree from Germany in 2005 we moved to Canada and I joined the University of Guelph, department of Plant Agriculture. I am working with Dr Lewis Lukens to study the effects of intermating on genetic variance, genetic map expansion and QTL mapping on maize. In 2006, we had the arrival of our daughter Kinjal, so, being a father was another great learning experience for me. I like to spend my free time with my family.
Christopher Duyvelshoff

I was born and raised in Oakville, Ontario. I first became interested in horticulture in high school while helping my parents in their perennial garden. Soon I started making my own plantings, especially vegetables and I was hooked. I entered the BSc (Agr) Horticulture program here at the University of Guelph in Fall 2005. During the summers of my undergraduate degree I worked at Sheridan Nurseries, the Royal Botanical Gardens and in the Guelph Trial Garden with Rodger Tschanz. I learned a lot about ornamental horticulture from these experiences. In my final year, I completed an undergraduate thesis in the artificial creation of polyploid Impatiens with Dr. Al Sullivan. Through my experiences in fruit crops class, along with my lifelong visits to the family cottage in Meaford in southern Georgian Bay, an area of intensive apple production, I developed a particular interest in fruit trees. With a desire to continue in higher education, I accepted a M.Sc position with Prof. John Cline working on biennial bearing and precocity issues with ‘Northern Spy’ apple trees. My research began in the spring of 2009, and to date, my experience working at the Horticulture Experiment Station (HES) in Simcoe has been very insightful to the field of tree fruit production in Ontario. The goal of my research is to provide ‘Northern Spy’ growers with information on improving production systems using growth regulators. During my spare time I enjoy hanging out with friends and playing various sports. As much as possible I try to go to the cottage to relax and tend my garden. Email: Christopher Duyvelshoff [cduyvels@uoguelph.ca]

Recent Defenses

Simpson, Jeffrey P., MSc. (BJ Shelp). Overexpression and role of gamma-aminobutyrate transaminase and glyoxylate reductase in Arabidopsis.

Byczko, Helen, MSc. (SR Bowley). Gene activation potential of MSHsfA4, a heat shock transcription factor from Medicago sativa L.

Brauer, Elizabeth, MSc. (BJ Shelp). Overexpression of cytosolic glutamine synthetase in rice improves utilization nitrogen use efficiency.

O'Connor, Kelly, MSc. (EM Lyons). The effects of fertilizer application method on species composition of a putting green.

Chapman, Ben, PhD. (T MacLaurin, DA Powell). Development and evaluation of a tool to enhance positive food safety practices amongst food handlers: Food Safety Infosheets.

Clark, Mary Jane, MSc. (JA Sullivan). Characterization and breeding of Aquilegia (Ranunculaceae) and Malva (Malvaceae) species for drought tolerance and aesthetics.

Samii Saket, Golsa, MSc., (I Rajcan). Development of high oil soybeans using Nuclear Magnetic Resonance and molecular markers.

Taheri, Ali, PhD. (J Subramanian). Ethylene, fruit thinning and molecular analysis of trichome development in peach.

Tian Ling, MSc. (BJ Micallef). The role of nitrite toxicity in photoperiodic injury of tomato (Solanum lycopersicum L.).

Walden, Alison, MSc. (HJ Earl). Physiological traits affecting drought tolerance in Ontario adapted soybean.

The Guelph Turfgrass Institute & Environmental Research Centre, known to most as the GTI, was established by the University of Guelph Senate in 1987. It was created to “promote an interdisciplinary approach to research, education and extension programs in turfgrass science at the University of Guelph, and to facilitate greater interaction between the University, industry and provincial government” (University of Guelph Senate Document).

In partnership with the Ontario government and the university, the turfgrass industry undertook a fundraising drive that resulted in the construction of the G.M. Frost Research & Information Centre building on the 150 acre Guelph Research Station property located to the east of the main University of Guelph campus. The Frost Centre opened in 1992 and is home to GTI staff, turfgrass industry associations, the Ontario Ministry of Agriculture, Food & Rural Affairs Turfgrass Specialist and also serves as a field lab for university researchers. The provincial government and Ontario turfgrass industry partnered to construct an extensive array of research areas that mimic recreational and urban green space areas. The property features a variety of landscaped and research areas including bentgrass putting greens, turfgrass variety trials and ornamental plant evaluation trials.

In addition to turfgrass and urban horticulture research, the facility also includes the Canadian Centre for Toxicology aquatic microcosm research facility, School of Engineering research into mitigation of surface water contamination in urban landscapes and adjacent agriforestry research areas. Research conducted at the GTI provides benefits not only to turfgrass managers and producers, but more importantly to the people of Ontario and Canada who utilize turfgrass for such recreational pursuits as golf and soccer as well as more passive uses such as lawns, parks and roadsides.

The GTI also serves as an educational resource for the university and has an active role in diploma, undergraduate and graduate teaching as well as industry professional development programs. The GTI provides consulting and advisory services to the industry, hosts a variety of field days and produces advisory bulletins for both turf industry professionals and home gardeners.

The GTI is funded by revenue from educational and consulting services as well as support from the Ontario Ministry of Agriculture, Food & Rural Affairs. Significant support for research plot maintenance is provided by in-kind donations of equipment and materials from turfgrass industry suppliers. Individual research projects undertaken at the GTI are administered by individual faculty with support from federal and provincial government agencies, private industry as well as the Ontario Turfgrass Research Foundation, an industry-run registered charity that raises and distributes funds in support of turfgrass research at the Guelph Turfgrass Institute.

Although not limited to urban areas, grass is the predominant plant type found in towns and cities and plays an important environmental role in urban ecosystems. Grass helps cool the urban environment in summer, prevents soil erosion, moderates and filters runoff while providing an important recreational playing surface for a variety of sports. Economically, the turf industry accounts for $2.6 billion in gross revenue and employs 33,000 Ontarians. The gross revenue attributed to turfgrass production and management is roughly equivalent to the top
The Associate Diploma in Turfgrass Management (ADTM) program started in 2003 as an offshoot of the original Associate Diploma programs that have been part of the Ontario Agricultural College since the OAC was founded in 1874. Administered by the Department of Plant Agriculture, the ADTM program is unique in that it is the only two-year residential diploma program offered on the main university campus. The program is recognized as the leading professional training program in turf management in Canada and also has an international reputation attracting students from across Canada and from as far away as Barbados, Germany and Australia. Speak to almost any turf professional in the world and you will find that the University of Guelph is synonymous with excellence in turfgrass education and research. This is in no small measure a result of the mobility and success achieved by our turf management graduates.

The ADTM program builds on long-standing University of Guelph expertise in turf management embodied by the Guelph Turfgrass Institute faculty and programs. Taught by an experienced and enthusiastic group of university faculty and industry professionals, the program provides a unique blend of scientific theory and practical knowledge. Between the first and second year of the program, students are required to complete an on-the-job paid internship. Guelph interns are in high demand and in addition to placements across Ontario and Canada, students have found internships in exotic turfgrass locales such as the home of golf - the Old Course in St. Andrews, Cape Kidnappers Golf Club in New Zealand, Augusta National - the home of the Masters Championship and perennial major championship host course Baltusrol Golf Club in New Jersey who have had a least one Guelph intern each summer since the program began. This past summer, one of the students had the unique opportunity to spend his internship at the All England Tennis Club home of the Wimbledon Tennis Championship.

Although only five classes have graduated from the program, alumni are already making their mark in the turfgrass industry across Canada and around the world. Graduates are working as superintendents and assistant superintendents in the golf industry and managing sports fields and sod farms as well. A few entrepreneurial grads have started their own businesses in turf and landscape irrigation, drainage and management. They also find jobs working as technical sales staff for industry supply companies.

The program admits 30-35 students each fall and is truly one of the recent success stories with the Ontario Agricultural College. The best measure of the program is that the vast majority of new students come on the recommendation of University of Guelph turf program graduates.
Turfgrass in Ontario is a $2.6 billion industry, employing over 30,000 full-time employees. The Guelph Turfgrass Institute and Environmental Research Centre (GTI) is the primary research centre for turfgrass science in Ontario and over the last few years Eric Lyons and Katerina Jordan have worked to significantly increase the volume of research being done. The amount of closely mowed bentgrass on the facility has more than doubled in the past 3 years, along with the addition of two new research areas of closely mowed annual bluegrass—one on soil, the other on sand. These expanded areas have facilitated a flush of new research on a variety of new and emerging issues in turfgrass science.

The GTI is the result of a partnership between the provincial government, the industry and the University of Guelph. This relationship creates a unique environment where university researchers, the provincial extension specialist Ms. Pam Charbonneau and industry stakeholders including: the Ontario Golf Course Superintendents Association (OGSA), Sports Turf Association (STA), Professional Lawn Care Association of Ontario (PLCAO), and the Ontario Turfgrass Research Foundation (OTRF) are all housed in the same building, adjacent to the research field plots. The research infrastructure and collaboration from the different groups, combined with the educational opportunities offered through the GTI and the university, make this a state-of-the-art turfgrass facility.

Our mandate is specifically to work on turfgrass science, and with the majority of our funding coming from the industry itself, our research becomes commodity-based more so than discipline-directed. As such we combine our areas of expertise with the needs of the industry to develop broad-based, multi-disciplinary research. Eric Lyons’ expertise lies primarily in plant physiology, plant nutrition and root biology, while Katerina Jordan’s is in plant pathology, integrated pest management and general turfgrass management. The success of such broad research is made possible by our support people, including our graduate students, the research station manager, Peter Purvis and of course technicians Ken Carey and Alex Porter who are integral members of the research group and whose skills and expertise make all of the research possible.

Establishment and nitrogen requirements of velvet bentgrass and creeping bentgrass

Due to its recuperative ability, excellent playability, and tolerance to both wear and low mowing heights, the current standard of turfgrass on golf course putting greens in cool-season climates is creeping bentgrass (*Agrostis stolonifera*). Over time, extensive research has led to a good understanding of the establishment and management methods ideal for this species. However, with the increasing pressure on turfgrass managers to reduce chemical inputs and water use, there has been an interest in evaluating potential alternatives to creeping bentgrass for putting greens.

Velvet bentgrass (*Agrostis canina*) was introduced to North America more than a century ago in a mix known as Southern German bentgrass. It became quite well established on many putting greens over the years, but as the turn toward increased maintenance and use of inorganic fertilizers occurred in the 1950s, creeping bentgrass was favored. This shift was due in part to its tolerance and, to an extent, its reliance on relatively high levels of nitrogen. Thanks to funding from NSERC and the OTRF, we initiated a study to determine the validity of the claims contending velvet bentgrass can survive and thrive under a low-nitrogen fertility regime.

As part of these efforts, graduate student John Watson conducted a large-scale project as part of his master’s thesis. Watson renovated three large putting green areas (two on native soil, one on USGA-specification sand) to include 1/3 each of L-93 creeping bentgrass, Penn A-4 creeping bentgrass and SR7200 velvet bentgrass (Fig.1).
1). Each area has been administered the annual equivalent of 0.25, 0.5, 1.0, 2.0, 4.0, and 6.0 kg/100m² (~0.5, 1.0, 2.0, 4.0, 8.0, and 12.0 lbs/1000 ft²) on a weekly basis to determine the effect of low to high nitrogen fertility on the growth of both species. In addition, the use of foliar versus granular fertilizer on each species is being compared. Results indicate velvet bentgrass is indeed able to tolerate a lower level of nitrogen.

One of the interesting observations of John’s work was the presence of chlorosis on the high nitrogen plots of the velvet bentgrass (Fig. 2). Graduate Student Huasong Xu is currently exploring the physiological mechanisms of this chlorosis to determine if it may be linked to the reduced need for additional nitrogen fertilization that John Watson observed. In his research,

Huasong is working with the Micaleff lab to examine the levels of nitrate, nitrite and ammonium in both the roots and shoots of velvet bentgrass and creeping bentgrass. He is also studying the enzymes involved in nitrogen assimilation to determine their relative levels in each plant and to see if their activities are linked to the nitrogen-induced chlorosis we are observing in velvet bentgrass. Our hope is that the work will lead to new concepts on how we can improve nitrogen use efficiency in plants.

**Thatch management of mixed creeping bentgrass/annual bluegrass putting greens**

Excess thatch, especially on a putting green, can lead to increased turfgrass stress due to effects including reduced water infiltration, creation of a false root zone and decreased buffering of extreme temperatures. Unfortunately, once unhealthy thatch levels have developed on closely mown turf, it is difficult to effectively remove this layer without significantly affecting turf quality and playability.

The objectives of this study are to determine what methods, or combination of methods, are the most effective at thatch removal, while monitoring changes in turfgrass quality with each practice. Comparisons are being made between the effects of:

- hollow tine aeration (two sizes) (Fig. 3);
- solid tine aeration;
- varying depths of verticutting and topdressing;
- a combination of the above.
The first two years of the study are complete and results thus far suggest that none of the treatments reduce the thatch layer itself, but that both hollow tine aeration and vertical mowing decrease the percentage of organic matter in the thatch and mat layer. This suggests that over time, thatch levels will decrease in the plots receiving either of these treatments. Therefore, this study is going to continue for a four-year period to determine the long-term effects of these cultivation methods. To date, no thatch reduction study has gone beyond two to three years and we are confident that the additional time will lead to more significant results and better recommendations for the end users. This study is being funded by the OTRF and the Quebec Turfgrass Research Foundation (QTRF).

**Turfgrass quality at varying mowing heights of different low-mow Kentucky bluegrass cultivars**

As new cultivars of Kentucky bluegrass (*Poa pratensis*) that can withstand lower mowing heights are being developed, there is an increased interest in using this species on high-end fairways, in the hopes of reducing the inputs required compared to creeping bentgrass. Kentucky bluegrass remains the standard for use on athletic fields and home lawns due to its excellent wear tolerance, aesthetic quality and rapid fill-in rate.

In this study funded by Pickseed Canada and the OTRF, 12 different Kentucky bluegrass cultivars are being evaluated for their tolerance to varying mowing heights—from 2 cm (0.75 in.) to 5 cm (2 in.)—to determine their potential for use on golf course fairways, athletic fields and high-end home lawns. Work will also be done to determine the cultivars’ tolerance to a variety of stressors, including wear and two common diseases—dollar spot and gray snow mold—at each cutting height.

The cultivars were established in the fall of 2007 and treatments began in spring 2008. To date, results suggest that the bluegrass cultivars are most tolerant of stress at the higher heights of cut – indicated by higher turfgrass quality at the greater mowing heights. However, weed invasion is least at the lower heights of cuts on some of the cultivars and greatest at the mid-range heights. As of next season, we will be implementing wear and determining how stress tolerance in each of the cultivars is at the varying mowing heights.

**Insecticides and herbicides**

Although turfgrass damage caused by leatherjackets is still rare, it is a growing problem in Ontario. Volumes of larvae can be an issue, especially after a significant rainfall event. In response, GTI researchers have been testing a number of products to help control this emerging pest. Testing ranges from finding the best timing and rate of traditional chemicals to testing new organics and alternative pest control measures (Fig. 4).

Canada’s Pest Management Regulatory Agency (PMRA) requires data proving a particular pest control product works on the pest in question before that information can be added to the product label. This work is necessary to continue to provide the golf industry with new chemicals and alternatives and to allow existing products to be used on new and emerging pests.

**Fertility research**

Fertility is an important part of turfgrass management. There is still quite a bit to learn about how turfgrass responds to different nutrients, and the effect different nutrient levels have on turfgrass health and quality. Each season there are numerous fertility studies being conducted at the GTI. These studies include testing of slow-release fertilizers on greens and fairways, comparing the new products to industry standards. In addition to the work being done on new types of fertilizer technologies, we are also looking at how...
nitrogen delivery methods impact the competition between annual bluegrass and creeping bentgrass on putting greens. Every year, more and more fertility programs are utilizing foliar fertilization as a key component; in some cases, it is the only nitrogen delivery method.

Graduate student Kelly O’Connor explored the effects of foliar fertilization on nitrogen uptake by annual bluegrass and creeping bentgrass. She used a variety of methods including competition experiments and basic growth experiments to determine the relative ability of each species to survive under foliar fertility. Her results indicate that creeping bentgrass growth is slowed when nitrogen is delivered foliarly while annual bluegrass maintains consistent growth under either fertilization method (Fig. 5). As part of her research she also performed both light and electron microscopy to better understand differences in the leaf surface of each species that may have lead to the differences in response to foliar fertility. This study was funded in part by the OTRF.

Water use at establishment

This project was initiated to determine the water needs at establishment of turfgrasses grown from seed or sod. For the seeded treatments, dry seeding, hydro-seeding and hydro-mulching (seed mixed with fertilizer and a thick mulch for moisture retention) were compared with two types of sod for turfgrass quality under varying irrigation regimes. The plots received a low, medium or high amount of water at a low or high frequency rate. The first set of plots was established in July of 2007 and the experiment was repeated in late August of 2007.

Results indicated that all treatments survived in all the irrigation regimes but that turfgrass quality was high in all of the hydro-mulched treatments, regardless of irrigation regime. Most interesting, however, was the data collected on weed invasion. It was found that although sod needed more water at establishment than the seeded treatments to maintain a high quality of turf, weed levels were consistently lower in all of the sodded treatments than in any of the seeded plots. With the current ban that is in place in Ontario, this data may give us some very interesting information on establishing and maintaining healthy turf stands.

Use of reclaimed water for irrigation of turf in nursery sod production

The purpose of this study is to determine the effects of various sources of non-potable water for irrigation of turfgrasses, especially for nursery sod production. Our graduate student, Patrick Schwieder is looking at wastewater, both from human waste as well as animal processing waste, along with run-off collected in a holding pond to determine how their use as a sole source of irrigation affects turfgrass growth and quality. In addition, Patrick will be studying the effects of the reclaimed water sources on soil chemical and microbiological properties – especially focusing on the effect, if any, on soil microorganisms involved in nitrogen cycling. Plots have been established this season and the study will run for three years. This study is in collaboration with Dr. Kari Dunfield of SES, whose expertise lies in soil microbiology. Funding is provided by OMAFRA and the OTRF.

Overseeding and alternative management for weed competition in established turf in lawns and athletic fields

With the passing of the Ontario Cosmetic Use Pesticides Ban Act, there is a growing need to determine ways of preventing or reducing weed encroachment into home lawns and athletic fields that don’t rely on conventional pesticides. This is a large four-part study funded by the Ontario MOE that looks at overseeding, alternative products, and proper cultural management aimed at reducing weed populations. The study is being conducted both at the

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**Fig. 5.** Mixed *Poa annua*/creeping bentgrass green testing nitrogen fertility on species competition.
GTI under controlled conditions as well as on in-use athletic fields in Guelph. Graduate student Cynthia Siva will be directing the portion on alternative weed management and hopes to utilize her background in plant pathology to optimize the use of currently available biological controls for dandelions and other broadleaf weed species. This study is led by Dr. François Tardif whose expertise lies in weed science.

**Phosphorus run-off from sod farms**

With growing concerns of the effect of phosphorus on our fresh water ecosystems research is being conducted to look at the contribution that different types of farming may have on phosphorus levels. This study, being conducted on site in the Lake Simcoe Watershed and funded by Environment Canada, aims to measure the potential phosphorus loss from fields used for sod production. This study is particularly challenging due to the complexity of sod production and the challenges of working on the farm. Included in the study is an attempt to reevaluate phosphorus recommendations based on a soil phosphorus test for sod production. Sod is uniquely challenging for determining nutrient recommendations as traditional yield studies are not possible because sod is sold per unit area so the yield equals the area of the field. In contrast to traditional cash crops where yield per unit area is important, sod production focuses on reducing the number of days until the sod can be harvested therefore increasing the number of harvests over a five to ten year period.

**Getting the word out**

The goal of the GTI is to conduct pertinent research on new and emerging technologies and address environmental concerns affecting the golf and turfgrass industries. But doing that research is only part of the centre’s mandate—GTI researchers also strive to deliver this information to turfgrass managers in a variety of ways.

The GTI annual report provides a comprehensive look at current research. *The GTI Advisor* is an electronic newsletter aimed at keeping turfgrass managers up to date on work being done at the GTI and providing general, helpful turfgrass management information. Researchers are also continuing, whenever possible, to provide educational talks (including details on current research) at conferences such as the Ontario Turfgrass Symposium, and national and provincial golf course superintendent meetings. In addition, work is currently being done to improve the GTI website to better communicate research results.

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**Guelph Centre for Urban Organic Farming Event**

The GCUOF has been working with Hospitality and Tourism Management students in developing a program involving a Grade 4 class at Jean Little Elementary School. The new program, aptly named Garden2Table hopes to educate elementary school children about growing, harvesting and preparing their own food. The aim of the program is to teach schoolchildren where their food actually comes from, as opposed to strictly from the Grocery store. Martha Gay Scroggins, the Co-ordinator of the GCUOF showed the Grade 4 students how to level soil to create garden beds, as well they planted lettuce. After the lettuce has grown, the students will return to harvest their greens and some other vegetables, and will then prepare a meal with Hospitality and Tourism Chef Simon Day.

(Pictures courtesy of Rebecca Kendall)
Twenty three years ago in 1986 I applied to the University of Guelph to work on a temporary basis and was called to work in a short-term project with the Office of Research.

I had worked with newer technologies during my ten years at The Co-operators and had just been introduced to the new and exciting computer near the end of my time there, so I knew the basics of the latest word processing software. Interestingly enough, I was apparently the only applicant at the time who had any experience at all.

Three of us started out working happily together in a very tiny ‘closet’ on the 4th floor of the UC. Needless to say, we learned quickly how to work well together! It was a fun time.

Time went by and temporary short-term turned into permanent long term. I moved to the OAC Dean’s Office to work as secretary to then-Associate-Dean, Bruce Stone. My other role here was to call for and coordinate submission of OMAFRA research project reports. Along came Bruce’s retirement and no new Associate Dean was named. I moved back to the Office of Research on a special project to test the new Oracle system being implemented for research. The job was not necessarily easy, but I had fun working with this new technology and learned a lot.

In 1995 I was hired to work at the Guelph Turfgrass Institute. I left campus for life at the G.M. Frost Centre. It wasn’t easy to leave campus and seeing friends every day. It’s been a whirlwind, but I can’t imagine working anywhere else. This little community works well together and we have become good friends over the years. I remember one of the questions people used to ask me was, “What on earth do you do there in the winter.

Life and work go on here at GTI – through sun *and* snow.

I think initially the largest challenge was learning about the systems that run the building itself – it may seem trivial, but I had no clue about wells, septic systems, heat pumps, computerized thermostats, the impact of cathedral ceilings on heat supply, security systems, the list goes on. I learned quickly about heat pumps – it’s COLD here in the winter!

In 2001 I was proud to be one of the core members of the GTI team that organized and ran the International Turfgrass Conference centred at Harbourfront in Toronto. There were over 500 people in attendance from all over the world. As well as the scientific presentations, we kept them busy and entertained for almost a week.

There were a few bumps, but overall it ran smoothly and was a great success. The years here have flown by. It’s hard to believe that I have been part of this GTI community for almost fifteen years! They are a terrific group and we’ve had a lot of fun over our time together.

I particularly like the part of my job that involves working with University departments, local businesses and the public to co-ordinate meeting rooms for various meetings and events. I’ve met many people and made a few friends over the years. Now that GTI has become part of Plant Agriculture, I’m enjoying being a member of the Plant Agr. Social Committee and slowly meeting members of my (gigantic) department!

I’ve just celebrated my 22nd wedding anniversary (2nd time around). My husband Len and I share six children and six beautiful grand-daughters. The second oldest has started here at University of Guelph this fall and the youngest, at 2 years old, has started nursery school. As much as I love being Mom, being Gramma is the best!

One of my longest-lasting hobbies has been genealogy. My father’s family originally settled in Guelph in mid-1840’s from Chiddingly, Sussex in the south of England. My passion was fueled during a side-trip to visit S. England during a trip to Ireland (where much of my ‘other’ family still reside). I found a tiny little church that
the family had belonged to. It was a powerful experience for me to be in this amazing place surrounded by my own history and sitting in pews that were marked with family names! Suddenly I needed to understand more ... and so the search began.

Searching for family history in England and Ireland and across here to Canada has been a roller-coaster of excitement and disappointment, but a hobby I truly enjoy. One thing I’ve appreciated that’s come from this is the peace to be found in walking through cemeteries, My kids used to shake their heads and pretend their Mother was insane ... but each would clamour to be part of the little trip on sunny Sunday mornings.

I also like to crochet, knit and garden and am SO loving travelling in our truck & fifth wheel trailer. Last summer we spent over two months exploring Newfoundland with a group of over 50 people in 27 different RV’s. It was an experience! I’d love to go back! We had the trailer at Southampton this summer and have enjoyed the quiet beaches and the relaxation. However, some of our RV group are planning a trip east to Quebec City and the Gaspe sometime during the summer of 2010 and we hope to be among them.

I was born in Tokyo, Japan, in a family of 6 siblings. I lived there until I was 12, when we returned to Toronto, where I finished public and high school. I started university at St. Paul’s College, University of Waterloo (biology and chemistry), but got tired of it after a couple of years. After a year off working in a paper mill in Port Alberni, B.C., I was ready to return to university, which I did at UBC, where I did my B.Sc. and Ph.D. in Botany, and a brief post-doc. I met and married my wife, Alice, while in grad school there. As a native West Vancouverite, she missed the mountains and the ocean (and the rain) when we moved to Guelph, but she’s gradually become acclimatized.

I came to Guelph in 1982, first to the Botany Dept. and then in 1987 to the Horticulture Dept., where I took over running Dr. Jack Eggens’ turfgrass research programme. In the years since I’ve worked (sometimes with fairly light supervision ) for various Guelph Turfgrass Institute directors, and then for Dr. Julie Dionne, and more recently Dr. Eric Lyons. I’ve done mostly turfgrass management research – a wide range of projects including cultivar evaluation, performance of fertilizers and other management materials, herbicides and insecticides, cultural management techniques, irrigation research, etc. I’ve also been involved in coordinating research plots and assisting in various aspects of running the Guelph Turfgrass Institute. Working with an always interesting stream of faculty, techs, grad and summer students means work life is never dull – 20 or so years with Norm McCollum – need I say more. I also teach in the Turfgrass Diploma programme and have been involved with various professional organizations.

Alice and I have two children, born and raised in Guelph (Victory/King George/J.F. Ross). Michael is a computer and systems engineer working with Hatch consulting engineers in Sudbury, and Heather has just completed her undergraduate degree in Studio Art and French (and has a show opening at Loop Gallery in Toronto in January 2010). Music is very important in our family – both kids play instruments (violin, viola, and more), Alice plays French horn, and she and I sing in choirs. I’m a long time member of the Guelph Chamber Choir. Alice worked at the University Library for many years, but took a welcome buyout in recent years and is pursuing writing.

I’m not much of a gardener (probably spend too much time managing vegetation at work – maybe when I retire), but I love to read, and visit family which is spread from coast to coast across Canada.
From January to May this year, I was in Rwanda training farmer’s cooperatives in vegetable production and pest management as part of a pilot program to increase rural incomes and satisfy increasing rural and urban demands for vegetables. The training project was under the Umutara Community Resource and Infrastructure Development Project, supported by the UN body, the International Fund for Agriculture Development (IFAD), which in large part supports sub-projects submitted by authorities at all levels in the province, cooperatives/associations and private enterprises.

Rwanda is one of Africa’s success stories, having emerged from one of humanity’s darkest moments, the 1994 Genocide, to a model developing country from agricultural activities. The total population of approximately 9.5 million concentrated on 26,338 km$^2$ (about half the size of Vancouver Island) makes Rwanda the most densely populated country in Africa, with land holdings averaging ~0.5 hectares per household.

The Government of Rwanda sees high potential in raising the productivity of rural economies and incomes of Rwanda’s resource-poor smallholder farmers through horticulture. Due to the small scale production structure and farm labour intensiveness, horticulture can contribute in a large way to creating rural employment and generating income for a large size of the population. Horticulture has the potential to simultaneously address several items on
development agendas including rural economic development, gender economic empowerment and improved nutrition.

To support rural vegetable production, my assignment was to train lead farmers in vegetable production and reinforce the capacity of civil agronomists. The training targeted cooperatives cultivating vegetables in marshlands where water is available year round. In total, I worked with 11 cooperatives training 200 of their members, of which 91 were women. The training took place in their fields as the objective was to provide practical, in-field training through observation and demonstration, akin to a farmer’s field school.

Each training day began with a site tour. A general discussion was then held with cooperative members to discuss the observations made during the site tour. The activities returned to the field for demonstrations to practically explain the training topic, the reasons behind specific practices and problems encountered in the field. When appropriate, a lecture accompanied the training day. The day ended by sitting in a group to discuss the day’s activities, to make a record of the day’s activities and to give instructions to complete the week’s activities.

The training covered topics from seed to market focusing on an integrated pest management approach to vegetable production. The training also included a visit to Kigali’s, Rwanda’s capital, principal farmer’s market. This was the first time for the majority of the project participants to visit this market, where they observed the
diversity of vegetables grown in Rwanda, quality differences and made potential marketing contacts. The training emphasized disease management as disease pressure is particularly high in the marshlands. The marshlands are characterised by low night temperatures due to their damp nature resulting in mist and fog that linger late into the mornings, creating conditions ideal for disease development.

In Rwanda, farmers’ knowledge of diseases and pests is minimal. They are unaware of the differences between damage caused by insects and disease organisms, the appropriate methods and products specific to manage each class of pest organism and spray to harvest intervals. This lack of knowledge is not limited to farmers, as many agronomists do not know the difference between a fungicide and an insecticide. When I would ask why a certain product was chosen, the usual response ‘it was the only product I had’ and I often observed insecticides being used against disease problems and pesticides being used at harvest.

Interest amongst farmers grew immensely during my time in Rwanda. With word of mouth prevailing, cooperatives were continually requesting to be included in the training project. A national counterpart assisted me in the training and is now continuing to follow up with the pilot groups and upscale to other sectors in the district where we worked.

I have witnessed the impact of horticulture for smallholder farmers. Household incomes increase relative to those from producing field crops on a similar small-sized plot of land allowing families to send their children to school, to access adequate health care and to improve their diets. While working on a previous project in Rwanda, I met many farmers who had uprooted their coffee trees in favour of passion fruit as they earned higher revenues from the local and regional sale of passion fruit than from selling coffee beans to exporters, despite coffee being a luxury product targeting markets that are associated with higher returns.

If anyone would like more information regarding this project or the impact of horticulture on poverty alleviation, I would be pleased to respond. Send enquiries or comments to parkerm@uoguelph.ca.
On Wednesday, July 23, 2009, the OAC Weeds Team arrived at the combined North Central and North East Weed Science Collegiate Contest hosted by ABG Ag Services located near Sheridan, Indiana. This was the first time the North Central and the North East had combined to host the conference. Two graduate and three undergraduate teams from OAC competed. The purpose of this contest is to provide students with an educational experience that tests their applied agronomic skills in the disciplines of crop protection and agronomy. A total of 90 graduate and undergraduate students participated, representing 11 different schools. The OAC Weeds team was the only Canadian team. The universities represented were Guelph, Cornell, Illinois, Missouri, Tennessee, Michigan, Nebraska, Pennsylvania, Virginia, Ohio, and Kansas.

The awards were distributed first to the individual conference winners and then for overall performance. Within the North East Conference, the University of Guelph, undergraduate teams placed first, second and third in this year’s competition. The first place OAC Weeds Team members were Blair Freeman, Andrew Reid and Scott Timmings. The second place team consisted of Amanda Green, Craig Arnett and Ryan Stafford and the third place team members were Wesley Emmett, Thomas Judd, Ryan Benjamens and Eric Schroeders. Andrew Reid, Blair Freeman and Amanda Green placed first, second and third respectively, for outstanding individual performance.

The graduate teams placed second and third. The second place team consisted of Scott Cressman, Chase Phillips, Joel Hemingway and Ben Rosser and the members of the third place team were Meghan Moran, Melody DeJong and Marijke Van Andel. In addition, several team members were acknowledged for their top ranking in the various events.

Since this was the first time the two conferences were combined, a single award, “The Golden Hoe Award”, representing the top undergraduate and graduate teams for the entire conference was awarded. The OAC Undergraduate team placed first, as the top undergraduate team in the entire competition, achieving higher marks than 10 other schools from the United States.

Guelph undergraduate teams have dominated the North Eastern Weed Science Society's Collegiate Weed Science Contest with 15 first place wins since 1983. The team was coached by Dr. Clarence Swanton. Special thanks go to Kevin Chandler and Mike Cowbrough for their contributions to the success of the 2009 OAC Weeds Team. The financial support of Bayer CropScience Inc., Monsanto Canada Inc., Dow AgroSciences, Syngenta Crop Protection Canada Inc., and the Ontario Weed Committee is gratefully acknowledged.


Changes, Changes

Dear Colleagues:

I wanted to thank you again for the opportunity to work as your chair for the past three years. It was a fun but challenging time and it seems that the challenging part will not be changing. Luckily, I found that the department does not lack for ideas or champions, and of course our relevance to global issues is constantly increasing. I know that we had been successful over the past three years in developing a number of initiatives that can be externally funded. Some of these are already well developed (and funded) while others are in various stages of development. These include; The Biomaterials Discovery and Development Centre, the Guelph Centre for Urban Organic Farming, a certificate in Sustainable Urban Agriculture, The Centre for Plant Breeding Education, A Chair in Landscape and Environmental Horticulture, a combined AAFC/U of G bean breeding program, an Industrial Research Chair in Bean Breeding, and a Research Chair in Renewable Fuels. And there will be more ideas. I am so happy that Dave Wolyn agreed to be the interim chair. He is a much better details person than I ever will be and he shares the passion for our department that we all have. I know that through Dave many more initiatives will come forward, and they need to because Plant Agriculture is needed to engage in research, teaching and service relevant to more and more of societies pressing issues. And I look forward to helping.

Rene

Congratulations

Congratulations to Dr. Alan Sullivan on being awarded the 2009 Distinguished Teaching Award from the OAC Alumni Association. This award recognizes the importance of effective teaching by faculty who play a significant role in the education of OAC students. A well deserved honour Al!

At the Community Breakfast in September Godfrey Chu was honoured with the Community Service Award for his assistance to Cantonese and Mandarin-speaking people who are starting a new life in Canada. Godfrey not only helps with access to legal, medical and education services, but also serves as a court & police translator.

At the same event Javaid Iqbal received the Innovative Leadership Recognition Award, in part for organizing the last 2 Research Lab Managers’ Boot Camp, as well as designing software for a leaf gas exchange system. Congratulations to both Godfrey and Javaid on these well deserved awards.

A number of Plant Agriculture employees & faculty were also recognized at the Community Breakfast in September celebrating 25 years of service to the University, including: Agnes Belosic, Angela Hill, Beth Livingstone, Barry Shelp, and Tom Smith

Dr. Neal Stoskopf, a former Crop Science faculty member was recently awarded Alumnus of Honour from the University of Guelph Alumni Association. Neal was a faculty member at the University for 37 years, as well as Director of the Associate Diploma program. A well deserved honour for Neal.
Windows 7 will be available on new systems and on store shelves October 22, 2009. Most IT people concluded that Vista was both slow and bloated (a memory & disk hog) but has Windows 7 fixed Vista’s shortcomings?

**The “Bells & Whistles”**

Windows 7 of course comes with many new features. Even the long standing apps like WordPad, Paint and even Calculator have been updated to a fresher feel with the ribbon interface; which was first used in Office 2007. There is a new “superbar” instead of the traditional taskbar. Classic themes and Quick Launch have both been removed in favor of the Aero theme and pinning applications to the taskbar. Jump lists are context dependant submenus that are available off the superbar or the start menu. This will allow you to access files or applications easily; you can even put your favorite applications on these lists. Aero Snap allows you to shove a window into the left or right edge of the screen and it'll expand to fill half of your desktop, nudge another into the opposite edge of the screen, and it'll expand to occupy the other half. That makes comparing two windows' contents easy. Alternatively, if you nudge a window into the top of the screen, it will maximize to occupy all of the display's real estate. Lastly, there is Aero Shake. When you “shake” a non maximized Window all other windows will be minimized behind it. Shake that same window, they will reappear. There are too many new features of Windows 7 to list but these were some of the important ones.

**Security & Drive Encryption**

There are few significant changes to Windows 7’s security system. But, one worth mentioning is: BitLocker, the drive-encryption tool included only in Windows 7 Ultimate and the corporate-oriented Windows 7 Enterprise. This will encrypt USB drives and hard disks, using BitLocker to Go. This would be one good reason to prefer Windows 7 Ultimate to Home Premium or Professional.

**Is it time to upgrade?**

Systems currently running Windows XP will have “extended Microsoft support” until August 2014. There is NO upgrade option for XP and it will require a fresh install.

In real world tests, Windows 7 often outperforms XP and Vista according to Engadget tests. The PC World Test Center's speed benchmarks on five test PCs showed Windows 7 to be faster than Vista, but only by a little.

Do you want to use your existing hardware? Test your system by using Microsoft’s upgrade advisor:


Most manufacturers of computers purchased between Oct. 2009 and Jan. 2010 are offering a free upgrade from Vista to Win 7. However, computers sold with Vista Home Basic do not qualify. Also, Windows 7 Professional and higher is needed to connect to a domain/server in the same way that XP Pro and Vista Business were the minimum standards.

Having the Windows 7 device drivers for your hardware and then using your special applications can be the big gamble. Getting early support from your local IT support person, and even UoG Computing Services, is a whole other story.

For additional information about the features of Windows 7 and if you should upgrade, take a look at the online article “Windows 7: The Complete Guide” at [http://gizmodo.com/5150298/windows-7-the-complete-guide](http://gizmodo.com/5150298/windows-7-the-complete-guide)

**References**

Windows 7 Review by PC World
http://www.pcworld.com/article/172602/windows_7_review.html

Windows 7 Performance Tests by PC World
http://www.pcworld.com/article/172509/windows_7_performance_tests.html

Windows XP: The facts about the future

Windows 7 - A leap ahead or a patch up job?
http://all-n-sundry.blogspot.com/2009/01/windows-7-leap-ahead-or-patch-up-job.html

Windows 7: The Complete Guide
http://gizmodo.com/5150298/windows-7-the-complete-guide
After several requests for this over the past few years I am happy to report that the Plant Management Network, http://www.plantmanagementnetwork.org/ is now available. Plant Management Network (PMN) is a “not-for-profit, online publishing effort whose mission is to enhance the health, management, and production of agricultural and horticultural crops. PMN is jointly managed by the American Phytopathological Society, American Society of Agronomy, and Crop Science Society of America, in conjunction with many other partners, including scientific societies, agricultural universities, and agribusiness.”

Access to this network includes electronic access to the following publications:

• **Plant Health Progress** Plant disease, entomology, and nematology of crops and ornamentals. (Peer reviewed)

• **Crop Management** Crop management practices, crop nutrients, and production agriculture. (Peer reviewed)

• **Forage and Grazinglands** Animal nutrition and rangeland management. (Peer reviewed)

• **Applied Turfgrass Science** Turfgrass management (Peer reviewed)

• **Arthropod Management Tests** Efficacy reports of insecticides and other means of insect control.

• **Plant Disease Management Reports** PDMR, formerly Fungicide and Nematicide Tests and Biological and Cultural Tests for Control of Plant Diseases, is a searchable collection of efficacy reports for chemical-based fungicides, nematicides, and biological/cultural methods of pest control.

• **Crop Management Variety Trials** Reports of variety and hybrid performance for crop and forage seeds.

• **Symposium/Meeting Proceedings** A collection of proceedings on topics related to agriculture and horticulture.

• **PMN Image Collections** A collection of more than 3,000 plant disease and agricultural images for disease identification, class illustrations, and presentations.

• **PMN Partner Extension Search** A comprehensive, searchable collection of agricultural and horticultural extension materials provided by PMN's land-grant university partners.

• **PMN Plant Science Database** A searchable collection of agricultural and horticultural solutions provided by partners in the industry and nonprofit sectors. These solutions include management recommendations, product listings, fact sheets, and more.

• **PMN Cross-Journal Search** A searchable index of peer-reviewed, applied journals published by partner organizations. Search records link directly to abstracts of the articles.

• **Focus on Soybean** An online portal for growers, crop consultants, and researchers seeking information on producing healthy, high-yielding soybean crops. Features webcasts from noted extension agents on soybean crop production, protection, and management.
• **Soybean Rust Information Page**: An online portal that includes news, perspectives, websites, events, and other important information related to Asian soybean rust.

• **PMN Update**: A free monthly newsletter produced by PMN that summarizes PMN’s latest industry news and research articles. Sign up at the PMN webpage.

The peer reviewed journals have been added to the library catalogue and we will be adding a general link to the PMN network for easy validated access.

The Library also now has a subscription to **Cold Spring Harbor Protocols**, an interdisciplinary journal providing a definitive source of research methods in cell, developmental and molecular biology, genetics, bioinformatics, protein science, computational biology, immunology, neuroscience and imaging. One of their subject sections is **Plant Biology** with the following protocol subsections:

- Plant Biology, general
- Analysis of Gene Function in Plants
- Arabidopsis
- Obtaining Plant Mutants
- Phenotypic Analysis in Plants
- Plant Cell Culture
- Plant Transformation
- RNA Interference (RNAi)/siRNA in Plants

Sample protocols:
- Quick Miniprep for Plant DNA Isolation
- The Moss Physcomitrella patens: A Novel Model System for Plant Development and Genomic Studies

**Requesting New Library Materials and Resources**

If you have suggestions for additions to the library collection please let me know or if you prefer this online form can be used [http://www.lib.uoguelph.ca/services/information_resources/additions_&_cancellations/suggest_an_addition.cfm](http://www.lib.uoguelph.ca/services/information_resources/additions_&_cancellations/suggest_an_addition.cfm)

**New Library Service:**

**FIRST … your learning connection** [http://www.lib.uoguelph.ca/first/](http://www.lib.uoguelph.ca/first/)

The Library has assembled a collection of resources, services and technologies for 1st year students designed to help make the transition to university learning smooth and successful.

- build: [Academic Skills](http://www.lib.uoguelph.ca/first/)
- find: [Course-Specific Support](http://www.lib.uoguelph.ca/first/)
- discover: [Online Resources](http://www.lib.uoguelph.ca/first/)
- explore: [Technologies & Spaces](http://www.lib.uoguelph.ca/first/)
- learn: [Time Management & Study Strategies](http://www.lib.uoguelph.ca/first/)


**Press Coverage:**


CTV South Western Ontario, NEWS- Breeding Healthy Peaches by UoG scientists at Vineland, Aug 20, 2009

Jay Subramanian— Peach Day - Exhibition and Display set up and run by JS, Glen Alm [Tech], Ken Slingerland[Omafra] at the OMAFRA atrium, Guelph

Clarence Swanton—CTV Toronto Evening News Sept. 29 & 30, interview with Tom Hayes on destructive aspects of weeds, and the effect of the current pesticide ban in Toronto.

The recent edition of Nutra Ingredients.com had a report on the study being done by Gopi Paliyath’s research group working with lecithin to boost fruit juice and sauce quality.

**Top Crop Manager** ran a feature article in it’s October 09 issue on work being done by Laima Kott and Ecaterina Simion to develop a new technique to produce corn plants with specific traits from individual pollen grains. Work by a number of Plant Agriculture researchers was highlighted in the 2009 Agri-Food Yearbook Edition of Research Magazine. Featured research included Laima Kott’s research on increased amounts of rosmarinic acid in spearmint tea which will help people with inflammatory-type conditions. Jay Subramanian was also recognized for his work on developing healthier fruit varieties with increased antioxidant properties. In the area of production systems John Cline’s work to help Ontario apple growers produce high-quality fruit in an economically sustainable way was highlighted, as well as Peter Patil’s collaborative research which led to the release of OAC Rex, a white bean variety with natural resistance to bacterial blight. On the Bioeconomy front, research being done by Larry Erickson, Gary Ablett, Istvan Rajcan, Manju Misra, and Amar Mohanty was featured. As well, Darren Robinson’s research into cover crops that will protect organic crops was highlighted.

The summer has been a very busy time for the Department, not only in the area of field crops but involvement with many conferences, workshops and open houses.

On August 18, a Vegetable and Alternative Crop Open House was held at the Simcoe station, offering hands-on demonstrations as well as plot tours. The theme of the day was “New Crops, Old Challenges”, and Plant Agriculture faculty at Simcoe, Alan McKeown and Adam Dale, joined with OMAFRA specialists to host the day. Some of the crops featured included: Luffa, Goji, Yard long beans, Edamame, Calendula, and many other unique crops. Plant Agriculture was one of the host departments for the joint meeting of the CSA/CSSS/CSAFM annual meeting held in August 4-7th. Over 200 people from across Canada attended the 3 day conference, which was held in Rozanski Hall. Istvan Rajcan, Rene Van Acker and Bill Deen represented Plant Agriculture on the Organizing Committee, along with faculty from Land Resource Science.

In August Javaid Iqbal also arranged the 2nd Research Lab Manager’s Bootcamp and Trade Show, which attracted over 100 people to the day long event held in Peter Clark Hall. The day was devoted to sharing challenges and opportunities for current or future lab managers.

**Upcoming Events**

The 3rd Annual Plant Agriculture “Amazing Race for the United Way”, Wednesday, November 4, starting mid-afternoon, teams of 2 are invited to participate in this exciting race around campus, great prizes for 1st, 2nd and 3rd place teams.

**ONLY** $10/team entry fee will get you into this spectacular adventure, to enter please contact Beth (blivings@uoguelph.ca; or ext. 52783) before Nov. 2.

The Royal Agricultural Winter Fair will be held in Toronto, November 6–15/09; [http://www.royalfair.org/](http://www.royalfair.org/) and ... if anyone’s in the Christmas spirit a little early, the Winter Festival of Lights in Niagara Falls begins November 7 and runs right through until January 4.
Congratulations to Chris Grainger and his wife Erin on the safe arrival of Grace Elizabeth on Tuesday July 7 at a healthy 7 lbs 3 oz.

Jamie & Angela Larsen are proud to announce the birth of their daughter Jane Elizabeth arriving at 7lbs. 1 oz in the wee hours of September 11. Congratulations to Jamie & Angela!

Our kudos to Andrew Burt who delivered his second child at home before the paramedics arrived! Andrew & Zoe welcomed Tabitha Jeanette Ritchford-Burt on August 16 at 3:38 a.m., weighing in at a robust 8 lbs. Mom and baby are doing well, Dad is still recovering! Tabitha’s big brother Finnegan is very proud of his new little sister.

Agnes Belosic’s 3rd grandchild arrived on September 16. Agnes daughter Miriam and her husband Patrick welcomed Anika Lilian Bougie born in Vancouver weighing in at 7 lbs. Congratulations to Agnes, and Ernest on their beautiful new granddaughter.

Aaron Bowman and Tasha welcomed their new little arrival, Aiden on July 28 weighing in at 7 lbs 15 oz. Congratulations to Aaron and Tasha on the arrival of their new baby boy!

The stork has been very busy this summer and has increased the size of the Plant Agriculture family substantially, mostly courtesy of our graduate students!! The little girls outnumbered the little boys 4–1, our best wishes to all the new moms, dads and grandparents!
Change to Newsletter schedule

Starting with this issue, the newsletter will be published 3 times/year with Fall, Winter and Spring/Summer editions.

Watch for lots more informative articles, student and staff profiles coming in future editions! If you have anything to contribute please send it to blivings@uoguelph.ca, all contributions welcome!

Happy Halloween!