



IVMP
INTEGRATED VEGETATION
MANAGEMENT PROJECT

Newsletter Winter 2009

Finding a better way to manage vegetation

Project Manager Update



Welcome to the first edition of the Integrated Vegetation Management Project newsletter for 2009. The IVMP is drawing together local and international knowledge and practice with the aim to assist the vegetation management industry in determining the best management practices and techniques for vegetation management.

Conducted over three years (December 2007 to December 2010), the IVMP is evaluating and confirming best practice methods to resolve specific mown vegetation management issues.

Outcomes from the research will integrate decision-making processes into mown vegetation management planning, design, construction, and

maintenance. This will allow the development of a more economical and sustainable mown vegetation management model.

The IVMP is trialling integrated strategies using selected plant growth regulators, herbicides and nutrition. These are being combined with mowing and other cultural practices to determine the best combination of practices for various species combinations.

To learn more about this project or share your ideas, visit www.ivmp.com.au or email me direct at steve.hampton@growsolutions.com.au

Kind Regards,
Steve

Introduction to the project

The Integrated Vegetation Management Project (IVMP) is a collaborative research project being conducted in Australia from December 2007 until December 2010. Drawing on current knowledge and practice, both nationally and internationally, the IVMP will evaluate and confirm best practice methods in resolving specific issues with managing mown vegetation in Australia.

An overall increase in environmental knowledge and regulation, coupled with an ever increasing focus on safety, has prompted the implementation of current vegetation management methods that are responsive but often prohibitively costly. These current practices are not sustainable. Mown vegetation management is costly, dangerous and needs to be repeated often. Mowing also results in significant weed seed dispersal issues driving up ongoing management costs.

A need for greater knowledge about the effective management of mown vegetation, concerns about the potential off-target effects of chemicals and an understanding of the economic benefits of stabilising desirable plant communities, has prompted the decision to undertake this work.

Trial work is being conducted in Queensland and New South Wales by research scientists from Queensland Department of Primary Industries and Valencia Ecosystems. Funding has been committed by Technigro, Brisbane City Council and Gold Coast City Council with Horticulture Australia Ltd (HAL) matching voluntary funding contributions on a dollar for dollar basis. With in kind support from industry partners Bayer Environmental Science and Syngenta Crop Protection, the total project value is in excess of \$800,000.

The overriding strategic aim of the IVMP is the sustainable management of all classifications of mown vegetation and the improvement of undesirable 'weedy' species composition to that of a desirable, more manageable species composition. The expected benefits include a more economical and sustainable mown vegetation management model.



Top & Above: Difficult to manage situations.

Project Partners



Dedicated to a better Brisbane



Gold Coast City Council



Know-how for Horticulture™



for smarter solutions

Industry Supporters



Bayer



Meet the IVMP Project Technical Team

The IVMP Project Technical Team comprises representatives from the project partners, combined with suitably experienced and qualified persons from Industry, Government and Research Institutions. The members of the Technical Team have been selected based upon their knowledge and expertise in vegetation management. To find out more about the Team researching better ways to manage mown vegetation visit the Technical Team Page on the IVMP website at <http://www.ivmp.com.au/project-team.php>



Mr Steve Hampton
IVMP Project Manager,
Grow Solutions Pty Ltd

Steve is a qualified horticulturalist with 21 years industry experience across Vegetation Management, Landscape Construction & Maintenance, and Public Spaces & Facilities Management. Steve has formal qualifications in Business Management, Horticulture, Workplace Training, Project Management, Quality Assurance, Contract Management, and Workplace Health & Safety.

As Project Manager, Steve is responsible for the overall success of the Project. Steve's role includes identifying, tracking, managing and resolving project issues, proactively disseminating project information to all project partners, and proactively managing scope to ensure that what was agreed to is delivered, unless changes are approved through scope management.



Dr Fred Yelverton
Associate Professor; Department of Crop Science
North Carolina State University

Dr. Fred Yelverton is a noted turfgrass weed expert and lecturer from North Carolina State University in the United States. Dr Yelverton has been a principal researcher on a number of projects in the United States exploring seed head suppression, new herbicides (such as the sulfonylurea's), Vegetation Management Under Guardrails, Low Maintenance Turfgrass and Management Systems to name but a few.

Dr Yelverton will provide an invaluable link with the US, where significant trial data information is available. This trial data will be reviewed. Where potential is identified for Australia the trial work will be replicated as part of this project



Mr Travis Gannon
Research Scientist
North Carolina State University

Working with Dr. Fred Yelverton since 1999, Travis has coordinated projects in all facets of turf, including sports turf, amenity turf, golf courses and roadsides. A major focus for Travis has been his work with North Carolina's Department of Transportation (NCDOT) developing Integrated Vegetation Management (IVM) programs for roadsides and other non-crop areas. This work has included strategies to convert existing roadsides to low maintenance species and application placement technologies for herbaceous vegetation management, utilising both herbicides and PGRs.

B.S. Technical Agronomy - North Carolina State University
M.S. - Weed Science - North Carolina State University
Establishment and allelopathic potential of Centipedegrass (*Eremochloa ophiuroides*) along rights of way

Meet the IVMP Project Team



Dr Sheldon Navie
IVMP Project Research Scientist
University of Queensland

Dr Sheldon Navie brings a significant amount of scientific knowledge to the IVMP project team, particularly in the fields of plant ecology, weed biology, and grass taxonomy and identification.

Dr Navie is based at the St.Lucia campus of the University of Queensland, where he has undertaken various roles with numerous internal and external organisations including teaching plant and weed identification to undergraduate students, the supervision of higher degree students researching the biology and management of weed species, and the development of interactive teaching tools for undergraduate students and the wider community. In recent years, Dr Navie's expertise has also been utilised by Biosecurity Queensland, Brisbane City Council and the Queensland Herbarium on projects involving the profiling and risk assessment of weed species.



Dr Henk Smith
Australasian Technical Services Lead
Syngenta Turf, Australasia

Dr Henk Smith brings a wealth of experience and expertise to the project team, providing increased technical focus and vast scientific information.

Joining Syngenta's legacy company, Zeneca, as a Field Biologist in 1999, Henk had previously worked with the Agricultural Research Council of South Africa, as Chief Pathologist for subtropical crops.

Prior to his appointment with Syngenta Australasia, Henk held the position of Product Manager - Seed Treatment, Turf and Ornamentals for South Africa. During this time he developed a strong global network within the turf industry.



Mr Jyri Kaapro
Research & Development Specialist Bayer
Environmental Science M.Agr. Sci. (Turf Management)

Jyri is responsible for the research and development of Bayer's new and current chemicals in turf and related industries. This is done by conducting field evaluation and development trials. The data generated is required for new product registrations, label extensions and product promotions.

In addition he provides technical support to Bayer staff and clients in such areas as product training, market development and demonstration trials. Prior to joining Bayer, Jyri was the Research Manager at the Australian Turfgrass Research Institute.



Mr Rod Wood
Technical Consultant
Brisbane City Council

Rod has over 45 years experience in weed management and is widely considered as one of Australia's leading authorities and advisers on weed management.

Over the years Rod has written a number of extension papers on weed control and has earned recognition for value adding and finding solutions to difficult weed problems. In his role with Brisbane City Council, he has developed over 10 technological innovations, including the Sensor vehicle and the Aquatic Weed Harvester, to improve ergonomic, safety and operational efficiency. Rod was the recipient of the Weed Society of Queensland Award in 2007.

Year one results of the IVMP

Background research commenced in December 2007 with a focus on identifying and reviewing relevant literature and prior research activities related to the IVMP Project.

Following the initial review and following consultation with members of the IVMP Technical Team, the team met in Sydney for the first Technical Team Meeting in February 2008. At this meeting the team developed formal meeting ground rules, reviewed the criteria for potential trials sites, discussed refinements to draft trial protocols and confidentiality, and discussed the use of the internet as a vehicle to communicate project information to project partners and other stakeholders. It was also decided that quarterly reporting should mirror the format HAL require for the Milestone Reporting, with each quarterly report building towards the Annual Milestone Report.

In February 2008 planning commenced for the project web portal. The Technical Team finalised the scope and a web brief and quotation was received for the build of the IVMP portal. Project reporting and communication requirements were considered and it decided that the secure web portal was the preferred communication vehicle for both confidential and public project information sharing and communication.

Construction of Stage One of the web portal commenced and was completed in July 2008 and final communication systems were implemented in September 2008. The Technical Team met again twice March and June to finalise trial site locations and requirements, trial protocols and project communication. Access into the DPI trial plots for the initial phytotoxic trials was also negotiated with Syngenta who had leased half of the trial plots at the Redlands Research Facility for a three year period.

In February 2008 work also commenced on the development of the trial protocols for the field efficacy trials. Trial sites for efficacy trials were investigated along with terrain and climate conditions. In May 2008 approvals for the use of field trial sites were sought. Initial efforts focussed on the undesirable species to be targeted, along with species lifecycles, seasonal cycles, composition, population dynamics, seed head heights and prevailing environmental conditions.

In March, April and May 2008 presentations introducing the IVMP project were delivered to a wide range of stakeholders involved in vegetation management in SEQ including Local Government Managers and Supervisors, Vegetation Management Contractors, Golf Superintendents and Industry supporters. During the same period educational forums were conducted with staff with vegetation management responsibilities who are employed by project contributors / partners.

In May 2008, screening trials of a range of chemicals began at the DPI&F facility at Redlands. The chemicals tested in these trials were products considered to have potential in assisting in the management of the undesirable grass species. The trials were conducted to evaluate the phytotoxic effects on desirable turfgrass species.

In July 2008, a research trip to the USA was completed by project representatives. The purpose of the visit the US was primarily to look at mown vegetation management in the US, specifically integrated vegetation management strategies from nutrition and appropriate species selection, through to the use of Plant Growth Regulators and herbicides with growth regulatory effects. The project representatives met with a broad spectrum of professionals involved in vegetation management in the US so as to better understand the successes and challenges faced by asset owners, asset managers, Vegetation Management service providers and product suppliers



Top: Integrated vegetation management at its best in North Carolina.

Middle & Above: United States IVM - Using native grasses and low-growing flowering trees in the transition zone