

# Fungis



**Newsletter of the  
Far North GIS Users' Group Inc**



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NARGIS 97 28 th. to 30 th. April 1997 for more information you can Email  
[cairnsman@internetnorth.com.au](mailto:cairnsman@internetnorth.com.au) or check out the Fungis homepage on  
<http://www.bushnet.qld.edu.au/~guy/fungis/>

## Words of Wisdom from the President

The first meeting of 96/97 Fungis Management Committee held at the D.P.I./D.N.R.? Offices Mareeba, was both positive and productive with all members attending and actively involved. (Can't wait for something controversial to be tabled) As President this was great, as the involvement of all members is critical for the success of this Committee.

Priorities for the Committee were put in place with NAGIS, Our Web page, Fungis Newsletter, GIS promotion into the Education System, 1997 Fungis workshop Programme, and our involvement in Regional Consultative Group for the Wet Tropical Coast as the main issues.

The current areas of involvement from each of the members were also varied from wild life & ecology & data acquisition CSIRO, GPS potential in the Sugar industry, Asset capture & linkage to Databases in Cairns City, Multi skilling of GIS personnel into the new Computer Managers role Mareeba, the success of local Consortium in the private sector, Current position with CYPLUS, merger of DPI & Lands, Data Integrity projects etc from DNR

All in all a successful start for the new Committee.

1997 will be a big year and I would suggest that all members take a big deep breath, have a safe, relaxing & enjoyable festive season including welcoming in the New Year and looking forward to firing up again when we resume at our next meeting in Alan Stafford country on Friday 17th January 1997.

*Peter Swain*

President

FUNGIS Management Committee.

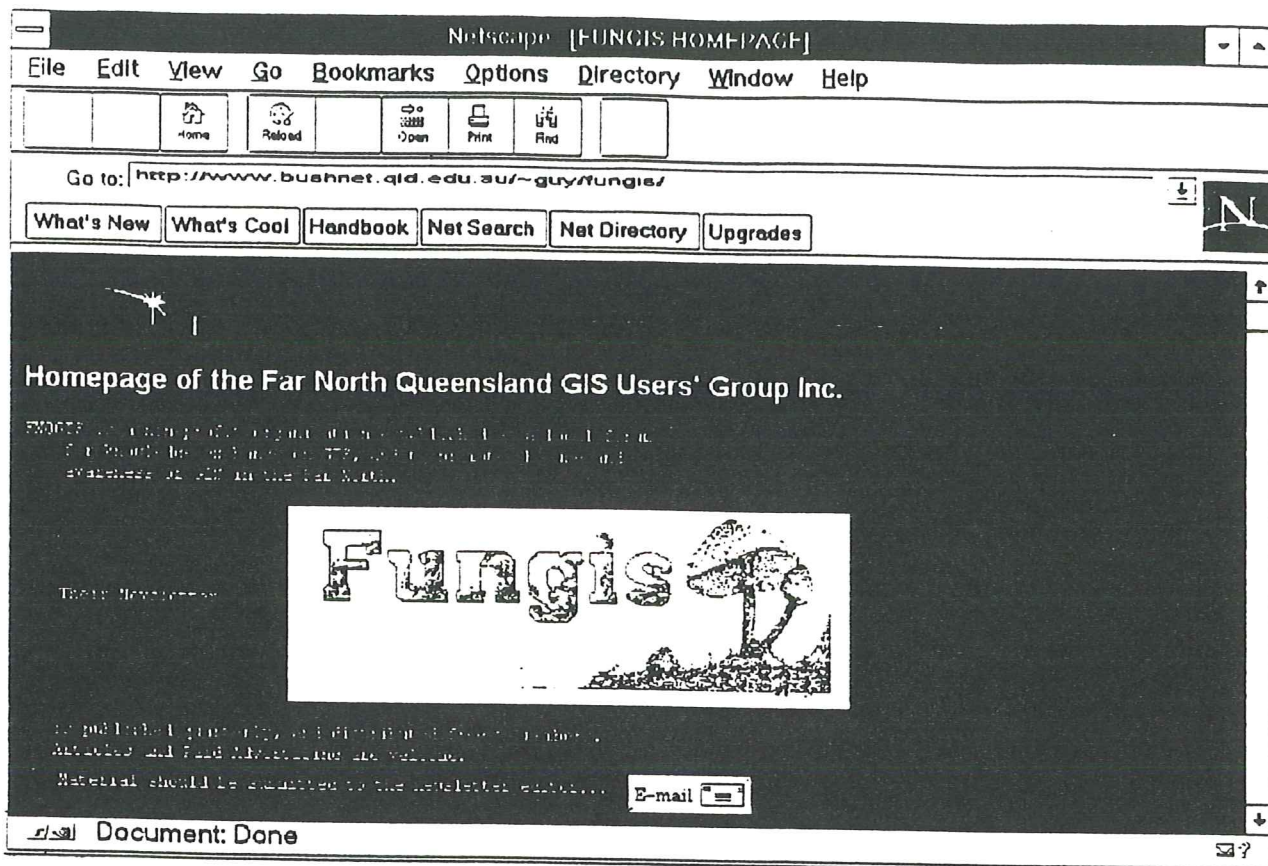
Peter in his new CCC summer uniform.





## Fungis Homepage finally up and running...

At long last we have managed to have our own webpage established.



Being the professional and progressive bunch we are, we couldn't go past the opportunity to expose ourselves. The introductory screen gives a brief overview of the Far North Queensland GIS User's Group, their goals and ambitions.

Links give visitors the opportunity for "hate mail", a Membership Registration Form, Gis Links, and a link to the NARGIS'97 Conference, which will be hosted by our group.

The NARGIS'97 Conference link comprises of several pages and includes General Conference Information, Forms for Registration and Feedback, General Information about the Conference Locality (Cairns) with further Links to more Information about Cairns.

Please be encouraged to visit our page and provide feedback and criticism (constructive please!) to the webmaster (gosh...I love! this word) at [utz@internetnorth.com.au](mailto:utz@internetnorth.com.au).

**Utz' Observation:** It's a mistake to allow any mechanical object to realise you're in a hurry.

A person without a Macintosh is like a fish without a bicycle.

Time flies like an arrow, but fruit flies like a banana.

STOP PRESS Stafford will shortly take delivery of a Trimble Pathfinder Pro XR GPS rover and base station, not forgetting the "Designer" headgear.

### **Precision Farming: Optimising returns through site specific management.**

Precision farming is basically farming of areas less than a whole paddock to facilitate higher returns for same or lower outlay. This technology has been used in North America for some time and has been introduced to Australia by Croplands Precision Agriculture ( CPA ) of West Australia. It is a division of Croplands Equipment Pty. Ltd.

The package is dependent on the GPS position having differential correction applied in real time and at an affordable cost to the user. Accuracy of around one metre is claimed by using the Fugro OmniSTAR Plus system which utilises a correction broadcast via an Optus satellite in geostationary orbit . The correction signal and allied equipment is rented at around \$5 per hour.

The thrust of the exercise is to map the yield within a paddock. This can be overlaid with other datasets such as Soil classification aerial and satellite imagery and fertiliser type/application rates as well as particular varieties of the crop. From the information gained, the farmer will know where to take soil for sampling and plugging all data into an analysis package.

In this way the farmer can start to accumulate information and develop a database for agricultural decisions and decisions re smaller land units as far as fertiliser and chemical application rates.

The monitoring system is being utilised by the grain industry. The unit is linked to a Micro-Trak Yield and moisture monitor which is used throughout the world.

The yield data, the differentially corrected position is logged by a device called 'Data-Trak' which places the information on to a PC card in the cab of the Combine, the card is removed every day or so and downloaded into the office PC

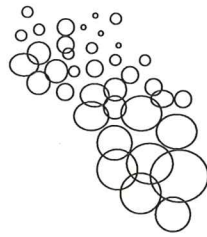
Proprietary software called YieldStar which is part of the overall package manipulates the data and produces on screen and via ordinary colour inkjet printers a quality yield map. For more advanced analytical work a program called FarmStar which has multi layer capacity has been written by Fairport Technologies in Western Australia.

This system is only useable in grain or cereal crops, there is at present no reliable method of monitoring sugar cane crops. Graeme Cox of the University of Southern Queensland and associates are working on a mass

Continued on Page 7.



# FROTH AND BUBBLE OVERVIEW



## THE AMAZON KING

*Our illustrious leader*

*Procurer of amazonian proportions of bands of bevy's  
( & Brian)*

*To be the envy of the rest of the state*

*A man possessed (dispossessed)*

*Swings through the network cables  
of the Natural Resource Jungle.*

*Though too often found on the ski cables in Europe  
Administering to his hard working flocks (from afar)*

## INTRODUCTION

The GIS and Cartography Unit, Department of Natural Resources has developed over the last couple of years to become the DNR North Regions major development centre for natural resource information systems. (It also houses the best staff that any department and company could ask for.) ho ho ho

## VISION

To be a valued partner of natural resource planning and management initiatives throughout its provision of timely, quality products and services. But the ultimate aim is to find 4 blonde haired blue eyed males under 35(each). They must be filthy rich!!!

## CORE BUSINESS

The Unit performs a range of tasks for a range of clients both within and outside the Department. This, at times, places a strain on the fairly limited resources of the Unit. Following is a list of what is considered as the core business of the Unit (Of course bribery easily rearranges these priorities!). Some things that work well for bribery are Cake, Jelly Beans, Beer, Toe Sucking (thats disgusting Seonaid!) basically any thing that is disgusting and fattening especially from the Granary, 113 Sheridan St Cairns.

1. Digital capture and maintenance of natural resource data sets in support to North Region resource survey and management projects.
2. Management of North Region natural resource data sets, including the development of standard spatial cover, data bases and associated meta-data.
3. The development and maintenance of a directory of natural resource data managed by the Unit.
4. Increase awareness and promote the use of GIS as a tool to assist natural resource planning and management, both within the Department and to external clients.
5. Interpretation and Distribution of Departmental Natural Resource data sets to other agencies.
6. Maintaining and organising our busy social commitments. (More Parties)

The Unit has 8 full time staff members with a background in various areas such as:

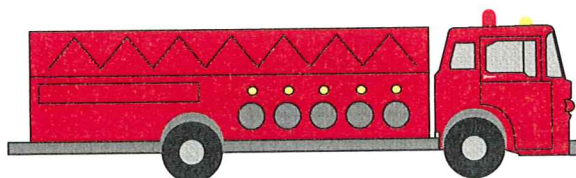
- . Soils & Vegetation surveys and mapping
- . Architecture (Drafting)
- . Engineering (who let them in)
- . System Administration
- . Science (Geography)
- . Administration
- . Data Base design & development

*A Merry Christmas and Happy New Year  
from all of us in the Froth and Bubble Department.*



For those wondering who Santa is it's our newest member of the team Georgie Pitt.  
Bye for now!!!!!!

# SEONAIIDS FIRETRUCK!



**Or what is more commonly called SDE (Spatial Database Engine).  
Or to the layman whopping big fast GIS database.  
This is one of the exciting developments in store for the future in  
GIS technology.**

Recently (seems so long ago now?) I had the surprised honour of attending the 10<sup>th</sup> annual Australia & 5<sup>th</sup> annual South Asia ESRI User Conference in Perth. I was pleased to find quite a strong Qld contingent with 2 other delegates from FNQ (Ray Delai, HRIC and Sandro Condorso, Atherton Shire Council).

The conference sponsor ESRI is the world's leading vendor in spatial information (GIS) software. ESRI is an acronym for Environmental Systems Research Institute. The company was established in America in 1969 and reached the position of world leader through a continued commitment to research, development and support and insights into advanced and future technology as was presented to us over the 3 days. **WOW!** The annual conference is the largest gathering of GIS professionals in Australia. Delegates come from many professional applications of GIS which provides valuable opportunities for interaction amongst peers. It is also a platform to have a say in the development of the future technology.

The three day conference comprised a well presented and disciplined program of Interactive Technical Sessions with parallel Special Interest (application) Group Sessions. The few organised social occasions also provided a forum for developing contacts, a valuable asset in our profession.

So onto the real heavy stuff. The parallel sessions were run with 1 stream purely technical, the other for Special Interest Groups (SIG'S). All technical sessions were video taped and made available for order and all papers presented in the SIG'S are in the conference proceedings. Delegates received a copy and these can be made available to interested people. The technical sessions presented the whats new in ArcInfo 7.1 - including editing, plotting, grid, tin etc. add ons. One really exciting new development was TINVRML - Tin Virtual Reality Module, need I say more. Also whats new - Arcview 3, SDE, Avenue, Cartography, Delphi and Map Objects. Be warned this might be the last release of PC ArcInfo. The new functionality and enhancements is as expected progressive and it was easy to be impressed with all this new wizzbang gadgetry, but it doesn't make the data quality better! The SIG'S covered Cadastre, Utilities, Road Transport, Environment, Local Government & Urban Planning, Mining, Forestry, Education and the most popular one of all configuring Hardware Operating Systems and Networks (surprise, surprise). These sessions gave people the opportunity to see the varied (am I running out of space yet!) applications of GIS technology. And it also brought together like groups of professionals to put forward ideas for development applications to ESRI.

Anyway after 3 days I was exhausted there was also the trip to the casino, the conference dinner and show (I thought Elvis was dead). The food and wine being excellent during the whole conference with my waistline attesting to that.

Highly recommended  
Seonaid Philip, Department of Natural Resources, Mareeba.





flowrate sensor to enable the measurement of the yield of the sugarcane as it is being harvested. The sensor is based on the measurement of hydraulic pressures, oil flow rates and speed signals.

Croplands Precision Agriculture has established a network around Australia to install their system which is reported to cost around \$9,000.00 plus signal correction costs. To obtain further information on this equipment contact David Young at CPA, 09 455 2778 or David Mills at Precision Farming, 090 63 2636.

For more information on Graeme Cox and associates work, refer to the Proceedings of Australian Society of Sugar Cane Technologists, 1996 Mackay Conference.

**80/80 RULE: The first 80% of a project takes 80% of the time. To finish the project takes up the other 80% of the time.**

**It is the naked truth.**

Civil liberties protesters and wowsers are very unhappy about the planned new satellite service which hopes to offer pictures of any part of the earth to the Internet using credit card owning public.

The SeaStar and OrbView satellites are scheduled to fly in 1997, their orbits are reported as 400km above the globe. The proprietor, Orbital Science, the US aerospace company, claims the images will have definition of about 1 metre. However Two other US companies, Space Imaging and EarthWatch are working on similar programmes and with even greater resolution.

They are touting their product as being suitable for all broadband information collecting such as censuses, surveillance, landuse change and even pictures of you sunbaking nude in your own backyard.

The wowsers in Civil Liberties are joined by Israeli Government who do not want their Arab neighbours checking out their security areas. Orbital Sciences claim the service is non military and is to aid commercial projects such as a company looking for new shop sites could use images to see the more popular areas. ( Personally I feel a GIS package such as ArcView 3 GIS would provide a more detailed and useful report and map for such projects. ) Other uses cited are tracking crops, monitoring drainage, detecting infestation and harvest predictions.

Orbital say all a client need do is define the latitude and longitude and they can, within a few hours have their picture

if u cn rd ths, u cn gt a gd jb n cmptr prgmng.

## **FREEBIE.**

### **TerraScan**

Jeff Bailey's Resource Industry Associates has decided to allow potential users to access and download TerraScan Lite software from their Web page. [www.ria.com.au](http://www.ria.com.au) as a shareware program. The offer is primarily aimed at farmers who will be able to gain some insight into the benefits of image manipulation technology. The program is minimal but sufficient for prospective users to understand the product. If you want to have the print function enabled it will cost you \$100. RIA have other offers including putting your data on CD ROM. Anyway check out their home page or if you are one of those odd people who don't surf the net their voice only contact is. +61-3-9462 4954.

### **From my mother's Irish Medical Dictionary.**

Cauterise:- Made eye contact with her.

Labour Pain:- Getting hurt at work.

Rectum:- Dang near killed 'em.

### **DWG Files**

Californian company DR DWG has released two utilities to allow users to manipulate .DWG files.

Dr DWG Professional allows a user to integrate drawings with a database, and to build useful applications using AutoCAD R 13. Dr DWG Netview is a Netscape plug-in that allows publishing and distributing of drawings on the Internet. Users can view and redline .DWG, .DXF and binary DXF files.

### **More things to do over Christmas.**

The Australian Geological Survey Organisation's webserver - <http://Web.agso.gov.au> has loads of goodies such as maps and images and a rapidly growing range of on-line database search capabilities. The tired old snapshot format found on most web pages is discarded and map production, scale etc. is in your hands. You simply open the URL <http://Web.agso.gov.au/map/> and follow the *hypertext* links. The GIS datasets currently available are derived from the 1:250 000 Murray Basin Hydrogeological Map Series. Data is available at the cost of transfer, in accordance with the Commonwealth's public interest spatial transfer policy. In the case of the Web, this means **free** availability.

We'll see the paperless office the day after we see the paperless toilet.



## Environment Training

**Local company Natural Resource Assessments (NRA) offers customised training courses in environmental management.**

The central aim of NRA training courses is to allow participants to gain practical experience in environmental management. For example, instead of hearing how to fill in a hazard report form, NRA courses make sure that everyone in the course actually completes their own hazard report based on a real site example. Equally, we incorporate field trips and activities to ensure that the course is practical and relevant to the course participants, their site and their workplace. We focus our training on real activities and hazards and on the responsibilities and tasks arising from environmental management systems.

NRA is currently developing a introduction to GIS course for a company in Cape York Peninsula. We have also received interest from another large company in Indonesia to run a similar course. The course covers:

- Introduction to GIS
- Editing new GIS Data
- Creating new GIS Data
- Query and Manipulate Data
- Data Output

Past courses designed by NRA cover a full range of environmental issues. Subjects cover:

Introduction to Environmental and Cultural Heritage Awareness.  
Workplace Environmental Obligations and Policies.  
Identification of Environmental Hazards and Management of Environmental Impacts.

- Management of the Biological and Cultural Heritage Resources.
- Roadside Development (covering Erosion, Revegetation, Landscaping and Rest Areas).
- Risk Analysis of Environmental Hazards.
- Reporting Environmental Hazards.
- Nursery Propagation and Rehabilitation.
- Ecotourism and Tourism Resource Management.
- Communication Skills.
- Rainforest Interpretation .

If you are interested in a training course for your organisation, where do you begin? Firstly you need to determine the purpose of the training course. Before we design a course NRA conduct a training needs analysis. This involves answering questions such as:

"What do you hope to achieve from the training?" and "Who needs to be trained to achieve these outcomes?" NRA can help you answer these questions over the phone. We will also give you recommendations on course length, format and delivery options.

NRA is a registered training organisation with the Vocational Education Training and Employment Commission. For more information on training, call Heather Robertson, NRA's Training Coordinator, or Tony Williams, Senior Environmental Scientist, on (070) 315 122.

**Stafford's Law:** Love is a matter of chemistry, sex is a matter of physics.

**Cole's Law:** Thinly - sliced cabbage.

**Law of Cybernetic Entomology:**  
There's always one more bug.

## Grossly Inacurate Script

I have a spelling checker.  
It came with my PC.  
It plane lee marks four my review  
Miss steaks aye can knot sea.  
Eye ran this poem threw it,  
Your sure reel glad two no.  
Its vary polished in its weigh  
My checket tolled me sew.

A checker is a bless sing,  
It freeze yew lodes of thyme.  
It helps me rite awl stiles two reed  
And aides me when aye rime.  
Each frays com posed up on my  
screen  
Eye trussed to be a joule  
The checker pour o'er every word  
To cheque sum spelling rule.

Before a veiling checkers  
Hour spelling mite decline  
And if were lacks or have a laps  
We wood be maid to wine.  
Butt now bee cause my spelling  
Is checked with such grate flare,  
Their are know faults with in my cite  
Of none eye am a wear.

Now spelling does knot phase me,  
It does knot bring a tier.  
My pay purrs awl due glad den  
With wrapped words fare as hear.  
To rite with care is quite a feet  
Of witch won should be proud.  
And wee mussed dew the best wee  
can,

Sew floors are knot aloud.  
Sow ewe can sea why aye do prays  
Such soft ware four pea seas.  
And why I brake in two averse  
By righting want too pleas.

This little ditty was found, lost in the  
Internet.

## EDITORIAL.

As this is our Christmas edition I feel  
we can dispense with the usual back  
page. Any newcomer reading this and  
wishing to know more can of course  
contact our Secretary Judith Searle on  
070 392 935.

I appreciate the input to this  
newsletter from Heather Robertson of  
NRA, the Siren set at DNR Mareeba,  
Der Uber Webmeister Utz and of  
course the words of Peter, he who  
will be obeyed keep us inspired. The  
professional journalists at GIS User  
and Spatial Business have kept us up  
with all that is new and important.  
Not forgetting our friends in the GIS  
and GPS vending professions who are  
always supportive

I am heeding Peter, taking a deep  
breath and taking 4 weeks off over  
Christmas, hoping you and yours have  
an enjoyable holiday, take a few risks  
and hang loose.

*Alan*