



## Fungis News

**Fungis**  
**Far North QLD GIS User**  
**Group**  
**ABN 24 188 148 957**

*Don't be left in the dark*

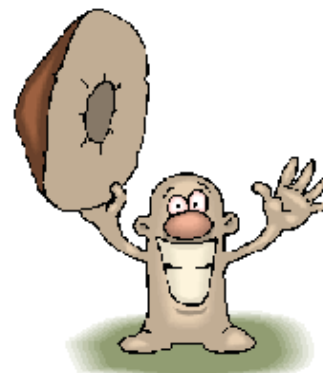
Welcome to the Fungis newsletter

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**Chair Report – Feb 2008**

Dear Members and Fans of Fungis,

I hope you all managed to have some time off over Christmas enjoying the company of family and friends. I certainly did and feel well charged up for a busy year ahead. It's been several months since our last newsletter. 2007 was big for Fungis and 2008 is shaping up to be bigger and better. Our membership has continued to grow with a wider variety of spatial professionals and new GIS users taking on the Fungis challenge.



After a 7000 km drive around Qld and NSW I am back in the beautiful Far North kicking back and wondering what of all the happenings in the world of Fungis I can write you about. The sun is high, it is Australia day and where best to enjoy it but on the beach of course. I consider myself very fortunate to have a beachfront 'office' here at Cape Tribulation with gentle waves lapping under the cool shade of the rainforest where I can gather my thoughts and make some progress on my Fungis duties. Later this afternoon we'll go kayaking along the fringing reef spotting turtles and tomorrow out wide to catch some coral trout for Sunday dinner.

**Workshops, Workshops and more Workshops**

For Fungis in 2008 our mission is shaping up to be the "Year of the Workshop". We will not be hosting a big conference this year but the Executive Committee is keen to hold a larger number of workshops for the benefit of the membership and other interested GIS users. With our membership steadily growing to cover a wider variety of organisations with increasing GIS applications, we must also enlarge the scope of our workshops.

Following on from the success of last year's GIS Boot Camp our first workshop of the year will center on spatial technologies in schools and may be of interest to both educators and members who enjoy sharing their knowledge. It will be held on the morning of 6 March following the official launch of the Spatial Mathematics for Mareeba Cluster Students project (SMMCS). This project is a great example of gearing up our kids for their future and value adding to the spatial technology and information resource of Fungis members and other organisations. More detail on the SMMCS Launch and Workshop on page 4.

Over the coming months Fungis will host or assist with a variety of workshops dealing with vegetation mapping, GIS for fire management, spatial information for disaster response and no doubt there will be more by the time the Executive Committee next meets. Members who wish to contribute to these workshops or have further ideas please contact me or [cpd@fungis.org](mailto:cpd@fungis.org). We will also keep you informed of any relevant events being held by the Spatial Sciences Institute or other organisations. Stay tuned to [www.fungis.org](http://www.fungis.org)

**The Wonderful World of GIS**

The application of spatial technologies and the process change it brings to many areas of the day to day lives of our community is not necessarily obvious but fast growing. It is a mechanism for building effective relationships between levels of government; it empowers the primary producer in sustainable practice and provides reality for decision making, be it working out the best place to build a new suburb or where the cheapest beer is in town. We can use it to enable environmentally sound wildfire mitigation practices and as an educational tool for young and old to better understand the world and the cause and effect of our actions. The applications are only limited to your imagination.....and budget!

**Information Fuels our Knowledge**

As with a car, spatial technologies need to be fuelled. Information is this fuel and improving the quality and economical generation of spatial information remains one of our biggest challenges. Between our three levels of government we have the ability to use this technology to better protect and serve our people and country. However, we are short on good fuel and all too often it is a crisis that initiates action from our politicians and policy makers entrusted with providing for this need.

Continued page 3



Continued from page 2

From experience I can't help but hold the view that the pursuit of profit making and cost recovery in the provision of government information services, in particular spatial information already paid for by the taxpayer, will prove to be one of the biggest policy blunders of the 21<sup>st</sup> century. After seven years working in the spatial industry and the last couple as Chairperson of Fungis, I have developed a strong position on this issue.

Is this policy contributing to an imbalance in what spatial information is being developed and where? Will the existing disparity in access to these resources between sections of the community widen, stay the same or –contrary to my view- be overcome through this policy? I am very keen to hear the views of our membership on this issue and how (or if) it affects them. Contributing to policy matters affecting our region is part of the Fungis Constitutional Objectives and we should pursue a constructive role in this along with our other goals.

### **The Local Government Challenge**

Words of encouragement are most apt for our members working in the Local Governments being amalgamated. Hang in there! Your skills are needed. Along with the challenges faced in a forced restructure, it is going to be a tough job bringing together the spatial information resource that underpins all those services that local governments provide to the community and other agencies.

Not only do you have to maintain the current level of service but you must also develop a more robust system of integration and delivery. Achieving this is especially important if these super councils are going to have any hope in meeting community expectations. I ask our members in other agencies and organisations to keep an eye out for these colleagues, go out of your way to assist where you can and please be considerate when doing business with them. After all we are supposed to be working together, it's the Australian way.

### **Bon Voyage**

Last and by far not the least, I extend a big thank you to Fungis Communications Task Group leader, Caroline Bruce, for her tireless effort on the Fungis Executive Committee and we wish her well on her adventure, wherever that may take her. Caroline and the Communications team have worked hard on improving our communications infrastructure and processes and we look forward to her return sometime in the future. Well good people, until next time, work hard, enjoy your work and as always "Don't be left in the dark".



*Reuben Sinclair*  
*Chair, Far North Qld GIS Group Inc (Fungis)*  
*0407 403 296*

[reubens@fungis.org](mailto:reubens@fungis.org)

[www.fungis.org](http://www.fungis.org)



# Project Launch and Workshop

9:20 AM THURSDAY 6 MARCH 2008

Mareeba State High School

RSVP Friday 29 February

07 4092 1399

[rcare9@eq.edu.au](mailto:rcare9@eq.edu.au)



## PROGRAM

9:20am Welcome

9:25am Opening Address

9:35am Keynote Speaker

9:50am Presentation of project resources to Mareeba Cluster Schools;

- Chillagoe State School
- Dimbulah State School
- Mutchilba State School
- Bibboohra State School
- MT Molloy State School
- Mareeba State School
- Mareeba State High School

10:00am Close

10:05am Morning Tea

*Spatial Education and Industry Displays*

10:30am Project Workshop

- Project demonstration - outdoor activity
- Spatial Mathematics for Essential Learning
- What was achieved, how and with who
- Connecting education and industry
- Beyond 2008

12 noon Workshop Close

**Spatial Mathematics for Mareeba Cluster Students**  
SMMCS is a whole of community collaboration providing practical learning resources for students and teachers in the upper Mitchell River Catchment.

Our primary aim is to enhance the core spatial mathematics learning outcomes for students through a series of Mathematics and Science Adventure Trails in, or near to, a student's schoolyard.

During the past year we have mapped each school and developed a range of dynamic spatial learning activities utilising resources supplied by a number of spatial information organisations and users.

The SMMCS project team extends an invitation to join them in celebrating the project completion and presenting the new learning materials to each of the seven schools.

Following the official launch a project workshop will be held for educators, spatial industry workers and anyone with an interest in developing these resources for schools in their community.

Funded through Australian School Innovation in Science, Technology and Mathematics (ASISTM) program the SMMCS could not have achieved its aims without the generous support from the following organisations;



Atherton Tablelands



Queensland Government  
Department of Education, Training and the Arts

Queensland  
Rugby  
Association



Australian Resource  
Engineering P/L



Australian Government  
Department of Education, Science and Training

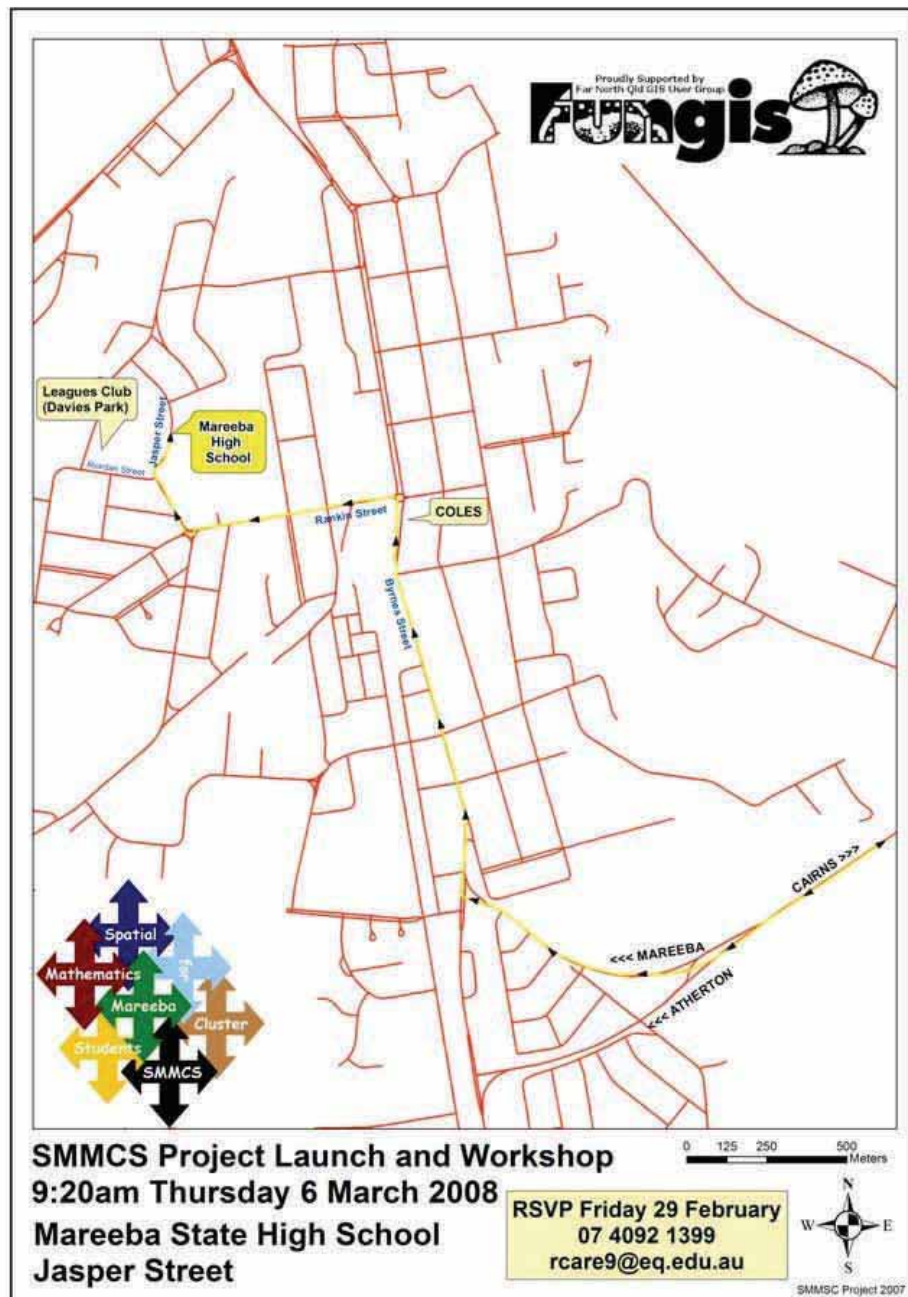


ESRI Australia



2.5 CPD points  
available for  
SSI members







### Fungis Christmas event

Fungis members and their friends and family came together on November 29 to celebrate the Fungis 2008 Christmas event. This time, it was barefoot bowls at the Edge Hills Bowls Club, accompanied by drinks, nibbles and lessons. Great fun was had by all ... and lots of stylish bowling techniques were on display.



### BootCamp certificates

The 2007 Boot Camp is a distant memory for many of us now. But for those of you who want to relive the memories, check out the photos on the Fungis website.

Certificates were sent out to all who attended the Boot Camp ... if you didn't receive one, contact Caroline at [carolineb@fungis.org](mailto:carolineb@fungis.org)





### **Second National Indigenous Land and Sea Conference**

Between the 9<sup>th</sup> and the 12<sup>th</sup> of October 2007, Girringun Aboriginal Corporation hosted the second National Indigenous Land and Sea Conference in Cardwell, on the traditional lands of the Girramay People. The theme of the conference was Caring for Country and it was an opportunity to highlight projects showcasing Aboriginal people's involvement in land and sea management issues. Following the conference, on the weekend of the 13<sup>th</sup> and 14<sup>th</sup>, Girringun and the Girramay People hosted 'The Caring for Country Cultural Festival', a cultural festival displaying the arts, crafts and both traditional and contemporary dance and music of Aboriginal people, with a local emphasis on the rainforest peoples of the Wet Tropics.

A number of high profile Aboriginal speakers including Noel Pearson (Director of the Cape York Institute for Policy and Leadership); Peter Yu (Chair North Australian Indigenous Land & Sea Management Alliance); Mick Dodson (Director National Centre for Indigenous Studies, Australian National University); Evelyn Crawford (NSW Department of Environment & Climate Change, Western Districts Director of Cultural Change); Shirley McPherson (Chairperson Indigenous Land Corporation); and Murrandoo Yanner shared their views and ideals on the future of Aboriginal people in land and sea management in Australia.

Three of the four days included breakout sessions where many Aboriginal organisations, including Girringun, gave presentations on their many activities relating to land and sea management. Several State and Federal Government organisations also presented activities which incorporate a significant Traditional Owner involvement. (Traditional Owners are the original Aboriginal inhabitants of an area and retain the right to speak for their traditional lands). All conference delegates also participated in one of four land or sea country tours highlighting significant local cultural places. Many government departments and other organisations maintained displays and information booths during the conference to demonstrate how and where they were able to assist Aboriginal organisations in land and sea management activities.

By arrangement, the caterers supplied meals made with bushtucker as the main ingredient where possible, such as roo stew and croc kebabs. Thursday night saw a 'cup murri' (hungi) cooked for the official conference dinner with entertainment including traditional Aboriginal dances by Sean Choolburra, Tjupurru and Emma Donavan.

Wednesday night saw the unveiling and dedication of the 'Flame Tree' on the Cardwell foreshore. The Flame Tree was commissioned by Girringun and the Cardwell Shire Council, the flame tree being the Cardwell Shire's emblem. Several US artists helped in the making of this sculpture made from scrap copper pipe from the old Townsville General Hospital and a significant amount of sheet copper. The sculpture is a fountain raining water non-stop and at night, for a few hours at least, the tree produces several flames which add to its spectacle. This tree is significant due to its size and to the fact that it is the only one (of currently four in the world) outside a major US city.

For the outsider, i.e. non-Aboriginal person, one thing that became very clear over the course of the conference was how much Aboriginal people see themselves and their culture interwoven with, and inseparable from the natural environment. Therefore any attempt to improve or restore the integrity of the natural environment must include an elevation of Aboriginal people and culture at the same time because they are one and the same, and one is not possible without the other.

Maybe this can be evidenced in the continuing deterioration of the landscape and our natural resources, correlated with the continuing deterioration of Aboriginal society and culture. Maybe the land is exacting its revenge on non-Aboriginal society for the injustices visited upon its children.



Friday saw the conclusion of the conference just prior to a short but heavy downpour, cooling off the site significantly. Girringun staff and volunteers then began the 20 hour turn-around converting conference site into festival site.

Saturday saw the commencement of The Caring for Country Cultural Festival with entertainment equal to none. Two stages provided plenty of music from local to national and international acts. A huge central sand pit hosted traditional dances from many local and national dance troupes.

The festival was an opportunity to showcase rainforest art and craft from the Wet Tropics region of Queensland. Many local artists came to exhibit their wares and attendees were able to participate in shield making and basket weaving workshops.

After a long day the crowd and the entertainment started to wind up. The main attraction of the night was seventies disco band Boney M who performed in front of a crowd estimated at around 5000. Not bad when you consider the population of Cardwell is only about 1500!

Sunday saw much of the same with plenty of people staying for both days. The finale saw many children from local schools perform their own song, 'United We Stand', produced through the Muso Magic project. Muso Magic is the brainchild of Adam Thompson, lead singer of the 80's band Chocolate Starfish, who takes music production to schools in remote areas.

The festival finally wound up at about 7:00pm on Sunday evening much to the relief of Girringun staff.

**Rod Nielson**  
**Spatial Information Manager,**  
**Girringun Aboriginal Corporation**



Girramay Elders Jack Muriata and Claude Beeron – traditional welcome to country





Flame Tree, Cardwell

Girroo Gurrll –half man and half eel, who travelled across the land in creation times, naming all of the sites and places in the landscape



The conference/festival site



**Spatial Technologies Supporting Regional Queensland: Charters Towers Is Where It's At**

Spatial sciences and technologies, such as surveying, cartography, remote sensing and geographic information systems (GIS), play an important role in our community, education, industry and society. When we think about it many questions we ask involve a spatial or "where is it" component. In October, over 100 professionals from the Spatial Sciences Institute Northern Group converged on Charters Towers to hold their annual Spatial Sciences Conference to discuss the latest in spatial information and technology ranging from the use of GIS and historical mapping to identify mine shafts in Charters Towers to demographic data from the 2006 Census to better understand our community.

A pre-conference Cadastral Reinstatement Workshop was held on Thursday 25<sup>th</sup> October, facilitated by Paul McClelland and Ewen Sneddon. The workshop was well attended. Thursday evening provided an opportunity for delegates to meet for informal dinner at a number of hotels around Charters Towers.

The Conference focused on the application of spatial information and technologies in supporting regional Queensland and was held at the Charters Towers Police-Citizens Youth Club (PCYC) from the 26<sup>th</sup> to the 28<sup>th</sup> October. Keynote presentations were delivered by Tim Barker, Director of the Queensland Spatial Information Office ("QSIC Sharing the Benefits - 25 Years of Spatial Information Governance in Queensland") and Raymond De Lai, Manager of the Herbert Resource Information Centre ("HRIC - Partnerships and Technology"). An excellent program of local presenters provided delegates with a range of interesting presentations on the use of spatial information and technologies in North Queensland.

Charters Towers was chosen as the location for this year's conference to highlight the importance of spatial information and technologies in supporting regional Queensland through such initiatives as rural road addressing for emergency services, state digital road network, asset and land management, natural resource management, agriculture, and information sharing. We also wanted to support the local community in which we were holding the conference and chose to hold our conference at the Charters Towers PCYC. The venue and level of service provided were excellent.

Among one of many interesting presentations, Bruce Galletly from the Cathedral School in Townsville, showcased some of the projects his students have been undertaking from years 8 to year 12. The Spatial Sciences Institute is very supportive of schools introducing spatial technologies to their students as it develops important life skills such as the ability to read and understand maps and directions, as well as improving students' knowledge and perception of their community. Hopefully students may also consider a career in the spatial sciences. We support schools by providing data, information and technical assistance and provide recognition to schools via the Spatial Technologies in Schools competition.

Following a full program of presentations on the Friday, the Welcome Reception was held on the Friday evening. This reception was sponsored by Conference Exhibitors and we would like to thank all exhibitors for their on-going support of the Northern Group Conference, particularly C.R. Kennedy as major sponsors.

Conference delegates also had an opportunity to visit a number of Charters Towers attractions and participate in a range of social activities culminating in a Conference Dinner at the Arthur Tittley Centre on the Saturday evening. Susan Phillips, Tourism Manager for Charters Towers, provided an entertaining and interesting presentation on the history of Charters Towers. Ivan Luscombe provided a moving tribute to Lloyd Twine and delegates made a toast to those members of our profession who are no longer with us.



Delegates also took time out to visit Tower Hill and locate a geocache site just off the walking track. Congratulations to Dana Andrews and Steve Lovatt (WS Group) for being the first to locate the geocache.

The SSI Northern Group Annual General Meeting was then held on Sunday 28<sup>th</sup> October with Adella Edwards chairing the AGM (*ably supported by yours truly as the scribe*). Reports from the Chair, Secretary/Treasurer, Town Group Conveners, etc were tabled at the meeting. Elections were then held for positions on the SSI Northern Group Committee. Congratulations to Jemma Picco (Cairns) who was elected Northern Group Chair and to Les Searle (Cairns) who was elected Secretary/Treasurer. Check out the Committee and Groups listing in this magazine to find out who the new Town Group Conveners in the Northern Region are.

Following the AGM, the Charters Towers PCYC provided us with a BBQ lunch before we packed up and headed for home. The feedback from delegates was very positive, particularly in relation to the conference program and venue and the range of social activities available in Charters Towers. A big thanks to the organising committee of Adella Edwards and Kenneth Melchert for organising a successful conference.

**Kenneth Melchert**  
**Conference Convenor,**  
**QSIC**  
**(thanks to SSI for kindly allowing us to reproduce this article)**



## **Stretch's Spatial Safari – Cairns to Adelaide...**

### **The Mission:**

Drive 10,000km to Adelaide and back, via Lawn Hill Gorge, Lake Eyre and home via Innamincka and play with mobile mapping stuff along the way...



### **The spatial bits...**

#### **Software:**

MapInfo Professional 7.0, Pocket PC 2003 OS, RapidView 1.2.7, MapXMobile 5.05, Remote Display CE, ER Mapper ECW Compressor 2.2, Jasc PaintShop Pro 7.0

#### **Hardware:**

Toshiba Tecra 2100 notebook  
Emtac BT GPS (hidden in a stubbie holder on the dash).  
HP iPAQ 5550 PocketPC (in padded aquapac sleeve)  
1GB High Speed SD Card

#### **Data inputs:**

GeoScience Australia NATMAP 250K Raster Series 2, NATMAP 250K Vector,  
UHF Repeater sites.xls (Australian Communications Authority)  
Landsat 7 Picture Mosaic of Australia (300m pixel size).ecw  
Diesel per-litre cost telephone survey data from towns along route (conducted July 2005)

### **The applications:**

#### **Making plans:**

The first thing to be done when planning a trip to Adelaide and back, across the Gulf Country, through the Simpson Desert and traversing the Oodnadatta, Birdsville and Strzelecki Tracks, was to ensure that the best route could be chosen, based on prevailing environmental conditions. When I'm in my Troopy, loaded to the gunwales with all sorts of paraphernalia, fuel cost becomes a principal concern. So... I made a thematic grid map of diesel prices (Figure 1). This was based on a telephone survey of fuel supply outlets along my intended route. I found significant differences, with a 30 cent per litre increase in the price of diesel once you crossed into South Australia, along the Birdsville Track.





With this in mind, I could construct a route, refueling plan and itinerary which could forecast kilometres travelled, estimate fuel consumption and calculate fuel costs. I created a GIS line file for the route I planned to take and a point file for the towns along the way. After geocoding my .xls spreadsheet itinerary (which also contained the fuel price survey results) to the towns in my GIS map, I could click on a town and see what the price of fuel was there, the distance I would have driven that day, estimated fuel consumption and fuel required for the next leg.

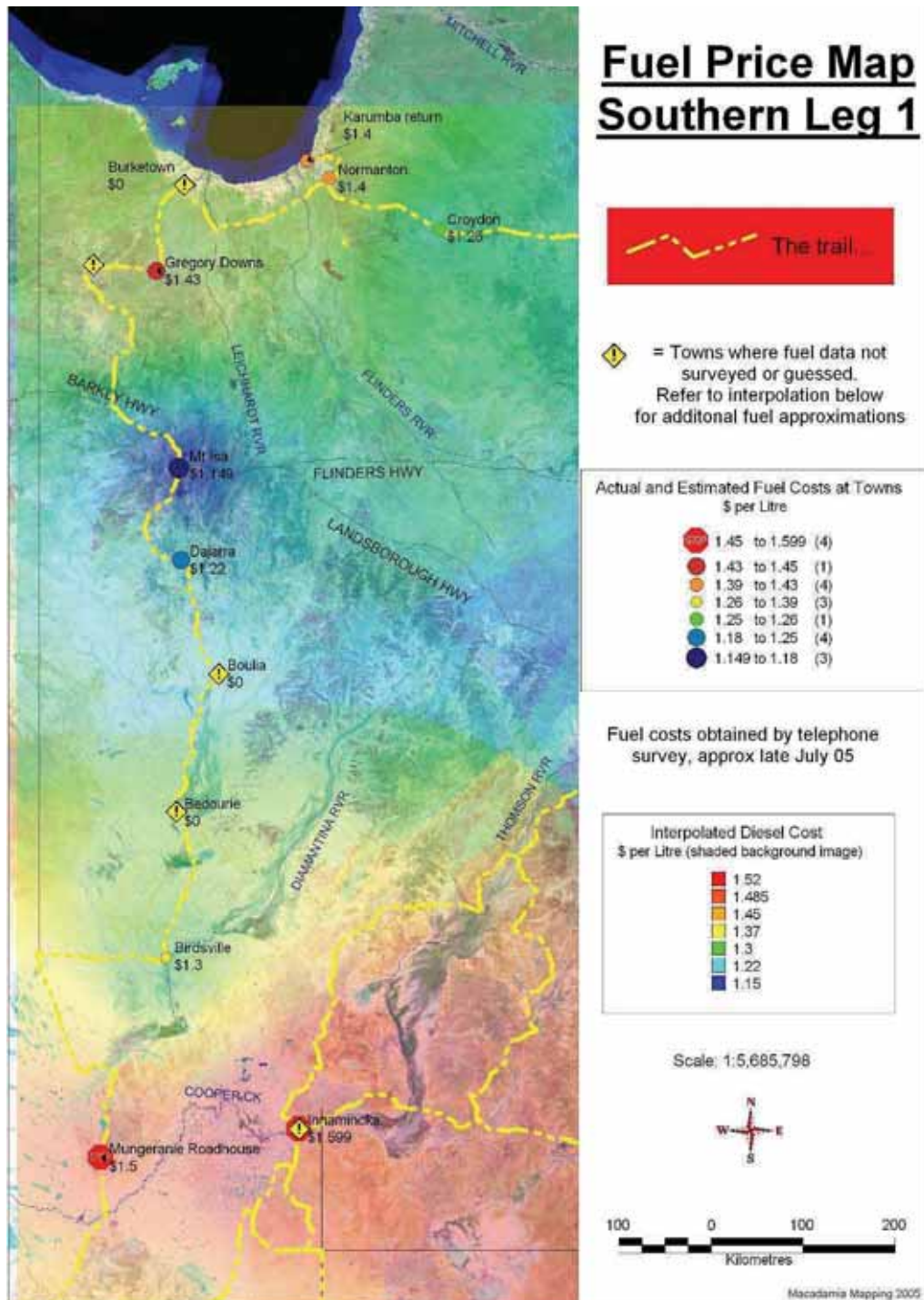


Figure 1. Fuel price grid thematic map, Gulf and Channel Country, July 2005.





In the interests of safety, I acquired a .xls spreadsheet of the UHF radio repeater sites across Australia. It contained all the handy attributes, including the channel, callsign for owner and coordinates. After geocoding this, I was able to add it to my GIS map. Once I could see the UHF radio points all sitting on hills shown in the underlying topographic image, I created a concentric ring buffer 45km from the UHF repeater sites. This gave me a complex series of polygons that illustrated my approximate UHF radio coverage from the Troopy.

All this data was a fair bit for my Pocket PC, so to compress the Raster Map, I created 20km x 50km map windows showing the 250K raster data and the UHF points and buffer along my route and saved high resolution .jpeg images of each window. It takes a few of these images to cover the route, so it became a bit of an obsession, staying up late preparing the maps... To compress the images, I opened them in PaintShop Pro 7.0, and exported them as compressed .jpegs. These were then further compressed down to 2MB each, using ECW Compressor before being registered back in MapInfo.

To reregister the compressed images, I used vertices on the buffer and the UHF points themselves as control points, along with towns. Once reregistered, the images were used along with the geocoded itinerary and town data to create small geoset files for use on the mobile devices. After adding the files to the device, I could open the geoset and view the above data. By loading the Landsat 7 Picture Mosaic of Australia in the background, I could turn off the topographic layer and have the satellite view of the landscape as I drove along.

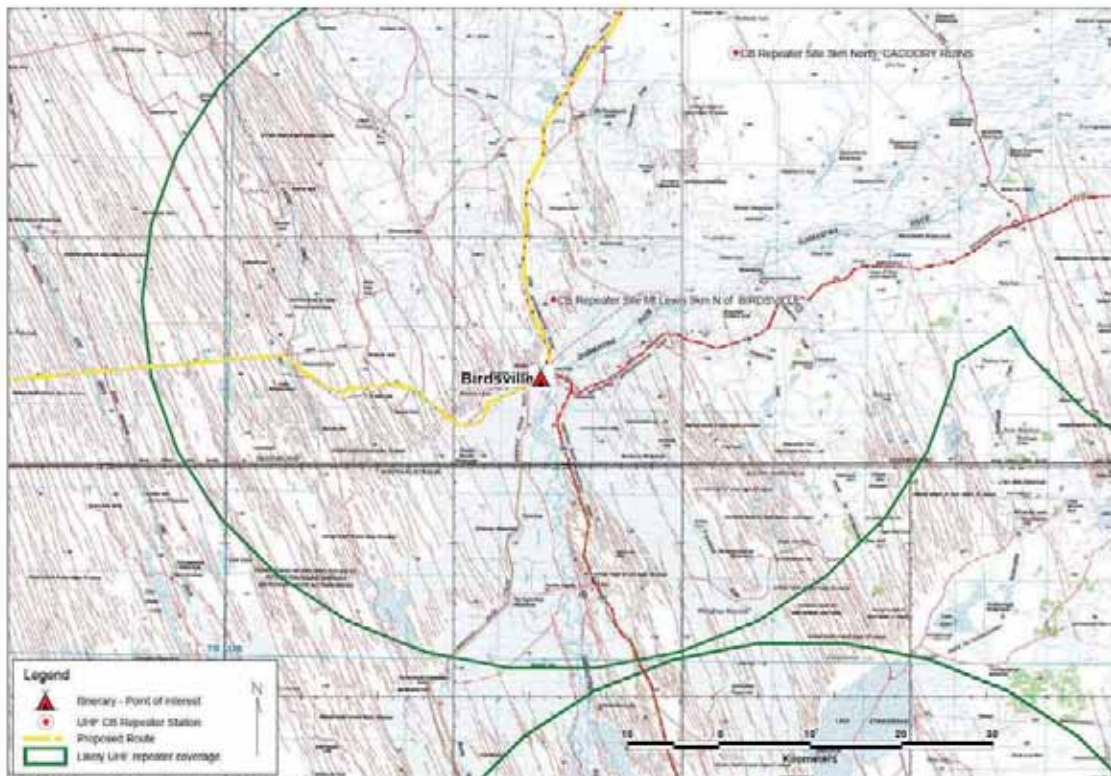


Figure 2. Sample Map showing route, UHF Repeater sites and likely UHF repeater coverage.



I established communications between the BT GPS and RapidView and set my GPS location to remain within the inner 80% of the 3.8" TFT-LCD screen, which allowed me to always see what was around me. It was great to be able to have detailed information on the surrounding landscape in what might otherwise be taken for relatively featureless country!

**On the road:**

Despite the usual issues faced when using devices with LCD screens in high temperatures, the gadgets served well to alleviate my boredom and avoid expensive fuel stops. Aside from that, the capacity to monitor the local UHF repeater channel whilst in the bush helped to alleviate the sense of loneliness one feels in the Simpson Desert in late October.

When I decided to take a side route through the Simpson Desert, in a 50km/h sandstorm, with poor visibility and the mercury nudging 42 degrees Celsius in the shade of the Birdsville Pub before I left, I was reassured, seeing my little red dot plotting over tracks marked on the map as I poked west over the sand dunes and continued on my bush adventure...

**Alistair Hart**  
**GIS Manager,**  
**Atherton Tablelands GIS**



‘Who said 4wd’ers were sedentary?’



### **Satellite spat: Americans crack European GPS codes**

So much for deep, dark secrets.

A group of American hackers have cracked the codes that were to be used by Galileo, the European GPS network that is struggling to be completed on time and on budget. Whether this is significant in the end remains to be seen.

According to a report in the most recent issue of GPS World magazine, a team from the GPS Laboratory at Cornell University used a computer algorithm to steal the codes that were keeping the orbiting satellite GIOVE-A (Galileo In-Orbit Validation Element-A) hidden from prying eyes.

GIOVE-A is the first of what will be a 30-satellite network, name Galileo, that will be launched over the skies of Europe by 2010. Galileo is projected to operate on the same frequency as the U.S. GPS network. Leaders of the U.S. and Europe have signed an agreement that stipulated that a handful of Galileo's pseudo random number codes would be open source and that the GPS signals ultimately being emitted by the European satellites would be free. Galileo officials, however, had other ideas.

The plan is that Europeans who want to access the Galileo GPS data will have to pay a fee in order to do so. This is different to the arrangement in the U.S., where the only cost is that of the GPS receiver you buy.

The magazine contains not only the algorithm used to open up the satellite GPS codes but the codes themselves. For their part, leaders of the Galileo project insist that those codes aren't the final ones anyway and so it doesn't matter if the general public can access the GIOVE-A signals now.

The Cornell team insists that their actions were not illegal and that they were only trying to highlight an attempt by Galileo's leaders to profit from what is essentially something they didn't own, open source code. The Galileo team, for its part, insists that all codes will be made available eventually. Is this GPS-political spat the last word on the subject? Probably not. After all, it's a few years yet until those Galileo satellites are orbiting Earth. That's plenty of time for more secrecy and hacking.

**Kindly reproduced from HTLounge:** <http://www.htlounge.net/articles/1074/1/Satellite-spat-Americans-crack-European-GPS-codes>

**Making Digital Maps (with Tele Atlas)**

*(Extracted from article about the Tele Atlas digital mapping company – refer details at end of article)*

Now to the part you have been waiting for: making the maps.

Interestingly the map data that Tele Atlas produces contains far more information than just roads. There are the basic attributes such as the road layout. Then there are the advanced attributes needed to generate routes, and then the turn features for advanced route guidance as used in the current SatNav products. But it doesn't end there. There are lots of additional value added components in the map data. These include addressing details. POI information, "signpost" data, speed information, turn restrictions, etc. You can see that a digital map contains far more information than a traditional paper one.

So how do Tele Atlas create the maps? Well they start with a number of data providers which they merge into a single consolidated database. Tele Atlas have over 50,000 data providers worldwide.

I will use the UK as an example here, but the process is the same no matter where you are. Actually I take that back. I will use Great Britain as an example. (I will explain later!)

The core of the Tele Atlas map comes from the Ordnance Survey. Although not the only supplier the OS provides the major input for the database, TeleAtlas also have their Field Survey vans and staff, high resolution Aerial Photos and paper maps also provide input for the database.

All of this data is consolidated into the "TA Map Workplace" this also includes any updates that are introduced as a result of the Map Error process (detailed below). The processing for the data is done in India, though due to the restrictions imposed by China a second data centre will be opened in China. If anomalies are found then these are escalated for investigation in a field survey.

This provides the core of the Tele Atlas database. This is then enhanced with georeferenced data such as POIs and then 3D Landmarks, the phonemes etc. The fully consolidated database is then published 4 times a year as a Tele Atlas Mapping Product in a format known as MultiNet.

Now there is a certain amount of time required after the last updates have been entered into the database and checked before the data is released. This allows the data to be tested prior to sending out to the application providers. By now the map data, although being the latest available can be considerably out of date and it has not got to the application builders like TomTom or NavMan yet. The OS data will have been of a certain age prior to being delivered to TomTom, and the aging process gets longer with each stage.

Finally the MultiNet data is delivered to the navigation application builders. They then have to process the map data and tweak it and compress it and then test it and finally fit it into the next available release or update of their products. In some cases the conversion and compression process can take a month or two.

So with this in mind tracking back from the release date of a product we can see when the "latest" changes can reach the database. I will use TomTom as an example as they normally release annually in May. This means that the Tele Atlas map release from Q1 is missed because it does not fit into the time-frame. The Q4 map release is the baseline for the release, this was released from TeleAtlas in November. Now assume that it takes Tele Atlas 1 month to finalise and productise the map release, we now have maps that cannot be later than October, but it doesn't end there. Tele Atlas will not have received and integrated the OS data on the last day they will probably get it at the start of the quarter, so the core OS is possibly the latest available in August.



Now I don't know what the OS release schedule is but I would be surprised if this will coincide. You can see how this all builds up resulting in the "Latest Available" maps being possibly a year old before they hit the shelves of your local GPS dealer.

Tele Atlas are aware of this latency in getting the most up to date data to market and are working to try and cut down the amount of time from update to release.

I haven't covered the work put in by the Field Survey Teams here. We will be visiting Tele Atlas in the UK in the next few weeks and will be covering the process of Field Surveying and how it improves the Tele Atlas data.

So that should give you an indication as to the process followed to create the mapping data for navigation applications. But "What about Northern Ireland?" I hear you ask. If you go back to the start of this section you will see that the core data comes from the Ordnance Survey. The OS provide very good and detailed mapping for England Scotland and Wales. They do not maintain the maps for Northern Ireland, this is done by Ordnance Survey of Northern Ireland and they do not provide the core data in the same detail as for England, Scotland and Wales. The same is true for all of the countries with poor coverage such as Eire, Portugal, and parts of Spain.

**Extracted from article written by Mike Barrett for PocketGPSWorld.com:**  
**'PocketGPSWorld.com visit Tele Atlas in Gent' – <http://www.pocketgpsworld.com/teleatlas-visit-aug05.php#makingmaps>).**

**Refer to full article on website for further information**





### Data Licensing

*On 29 December 2007, the 'Science Show' (ABC Radio National) broadcast one of the 2007 Alfred Deakin Innovation Lectures – about intellectual property rights, computers and the future. One of the speakers was Professor Brian Fitzgerald, Faculty of Law, Queensland University of Technology, and a "leader of Creative Commons" (flexible licensing – see [www.creativecommons.org](http://www.creativecommons.org)). Following are excerpts from his talk.*

"Three things I'd like to float: free our data; unlock our democratic heritage; open our public digital archive.

"One of the biggest innovations ... is the development of what is called 'open content licensing', a simple yet rudimentary legal vehicle borrowed to some extent from the free software movement. ... My particular interest is to stimulate discussion about open access to government and public sector information. We know that access is a key driver of social, cultural and economic innovation ... having a diverse array of sources to find new ways of doing things, whether it be in health, water, education ... is incredibly important.

"In 2005 the Treasurer, Honorable Peter Costello, announced that the Australian Bureau of Statistics would release its data for free ... [this] was a fundamental move in access to public sector information. In 2004, the Prime Minister announced that Australia would have, and is in the process of building, an accessibility framework to underpin the way that we share publicly funded data. In January 2004, the Australian government signed on to the OECD's declaration on access to research data from publicly funded research. One of the cornerstones of that declaration is that there should be a sense of openness and sharing where appropriate of publicly funded data and knowledge. Late in 2006, we saw the release of PMSEIC, the Prime Minister's Science, Engineering and Innovation Council's report called *From Data to Wisdom*, [in which] key recommendation six called for fair and equitable access to publicly funded research.

"Much of the information held by government is covered by government copyright ... Much of the copyright is inactive. Even where cleared for privacy and security reasons it's not shared with the public because [there's] no facility to license it on a large scale, or because a rent-seeking, charging model is still in place. Contrast that with the notions of maximising value, not protection, or that the value of information is in its use. [We are currently demonstrating a "closing the gate, rent seeking" mentality, even in the case of publicly funded data/information – "our own democratic heritage"]. Rather, we should be releasing the data to sponsor further innovation which, as the ABS will tell you, opens up new revenue streams and new ways of doing things. So instead of just thinking about charging a dollar to one hundred people upfront, could we think about opening the data to a million people and maybe having five very profitable businesses arise from that?

"A report recently released by the Queensland Government called *Access to Government Information and Open Content Licensing* [claims that at least 80% of government information is spatial information. 85% of government material could be released on an open access model. New content licensing models provide a facility for whole of government generic licensing. Stamp the material with the conditions of use, license in advance and let people and machines search and discover and reuse it online. It's been considered by many agencies, [including] the Queensland government, the Victorian government and the federal government, but we could do better.

"Importantly ... the Online Communication Council [has recently] released details of the national information sharing strategy, which has as its focus the sharing of information between governments, between agencies, and with the community, breaking down the silos that provide barriers to information integration and searchability, which are the mobilising factors, or enablers, in the information world. ... A better response to things like Cyclone Larry, the tsunami, national and community emergencies can be assisted by this kind of activity."



Sounds like a bloke after Fungis members' own hearts?

Editor's note:

For information on open data access initiatives in Queensland, refer to the Government Information Licensing Framework page on the QSIC website:

The QSIC [business environment](#) for licensing spatial information product and service transactions has been in place in Queensland since 2000. In 2006, QSIC commissioned the Government Information Licensing Framework Project, to review the business environment in terms of best practice and international trends in the transaction of public sector information.

Read more at:

<http://www.qsic.qld.gov.au/QSIC/QSIC.nsf/CPByUNID/6C31063F945CD93B4A257096000CBA1A>

Extracted from the 'Science Show' (ABC Radio National, 29 December 2007, Alfred Deakin Innovation Lecture.

Many thanks to Anne Stapledon for finding this gem for us.

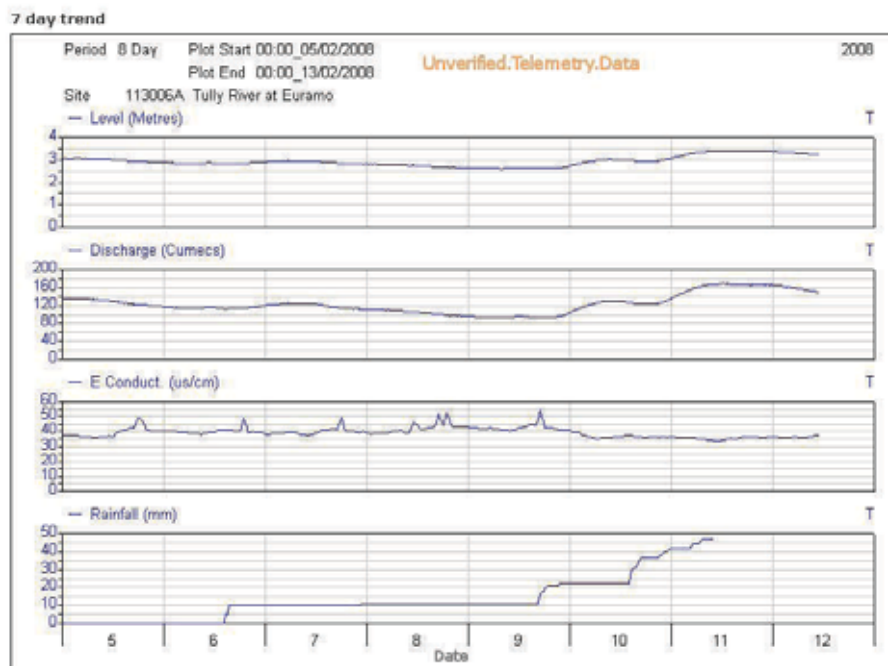
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### Searching for streamflow data in Queensland

One of our data-keen members found the following useful tool on the NRW website. Check it out to find out where active water monitoring sites occur within selected catchments. Data available include site details (location, catchment area, date open, etc.) and current and historic data in graphical and tabular format for river level, discharge, conductivity and rainfall. You'll be 'drowning' in all this information ...!

Access the site from: [http://www.nrw.qld.gov.au/water/monitoring/current\\_data/map\\_qld.php](http://www.nrw.qld.gov.au/water/monitoring/current_data/map_qld.php)

Data collected over last 7 days



Example of graphical data available for a water monitoring site



### Valuing Spatial Information

For those of you needing to quantify the value of your spatial information proposals and projects to clients, a report compiled by the Australian Spatial Industry Business Association (ASIBA) provides significant authoritative information on this issue. ACIL Tasman's Marketing Director, Alan Smart, says "Spatial information and technology has a clear and verifiable impact on just about every industry and government activity in the country". ACIL Tasman further states that this report "... delivers proof that the spatial information industry is worth billions to the Australian economy".

A synopsis of the report along with its 12 Recommendations has been published at: [http://www.directionsmag.com/article.php?article\\_id=2608&trv=1](http://www.directionsmag.com/article.php?article_id=2608&trv=1).

Worth a scan!

**Thanks to Tom Taranto for alerting us to this.**

### Conference notifications:

#### CoastGIS 2009

CoastGIS 2009 is scheduled for the second semester of September 2009 in Florianopolis, a city located in Southern Brazil. Further information will soon be available at [www.coastalzone.net](http://www.coastalzone.net) and [www.coastgis.org](http://www.coastgis.org).

For more information about the conference, please contact Debora M. De Freitas ([freitas.debora@gmail.com](mailto:freitas.debora@gmail.com)), School of Earth and Environmental Sciences, James Cook University, Australia.



#### Society for Conservation GIS 2008

The Society for Conservation GIS (SCGIS <http://www.scgis.org/>) invites you to "Save the Date" for the eleventh Annual SCGIS Conference, August 12 – 15, 2008, in Monterey, California (USA). The theme for this year's conference is *Our Changing World*. This is a wonderful opportunity to learn about the conservation of natural and cultural resources through geospatial technologies.

The SCGIS conference is the week after the ESRI User Conference. Refer to <http://www.scgis.org/Lev3Page.aspx?Page3ID=21> for more details.



**The Society for Conservation GIS**



### Qld Spatial Conference 2008

The Qld Spatial Conference will be on the Gold Coast, 17-19 July 2008. The Conference theme of *Global Warning: What's Happening In Paradise?* provides an opportunity for spatial information professionals to share how they are applying their knowledge and expertise to the challenges of climate change and water conservation.

For further details, visit: <http://www.qsc2008.com.au/>



**Thanks to various members for the above notifications.**

**If you would like us to publish information about an upcoming conference or event, let the Editor know at [communication@fungis.org](mailto:communication@fungis.org)**

### Arc Cow

Need to liven up a map with a cow or two? Then ArcCow for ArcGIS9.x is just what you need!

Check out <http://www.spatiallyadjusted.com/2008/01/15/arccow-for-arccgis-9x/#comments> to find out more and to view just how your maps can be enhanced by addition of a cow or two...

**Thanks for this pearler, Andrew Mitchell.**

