FUNGIS News Nov08

Far North Queensland GIS User Group Inc.
ABN 24 188 148 957

Don't be left in the dark

Welcome to the FUNGIS newsletter

In brief:

- Meet the Executive - Fungis Executive Members 2009
- History of Fungis photos
- Fungis Annual Conference 2008 - Celebrating 20yrs of Fungis
- Yalanjiwarra Jalunji Marrjanga Aboriginal Corporation Cultural Heritage Recording Project.
- Aboriginal Cultural Heritage Recording - Some food for thought
- Fungis end of year Christmas drinks function - Kuranda fun
- SSI Interesting Articles and Websites
- SSI Young Professional Event - Open to spatial people under 36
- FREE GPS software - GPSS for navigation, PDA's, Smart-phones...with maps for 163 countries
- Emergency Services All Hazard Symbology
- SSI Queensland Spatial Excellence Awards (QSEA) 2008
- Reef Atlas - Great Barrier Reef Climate Change
- Spatial Mathematics for Mareeba Cluster Students
- Fungis Directions Forum Summary - Fungis AGM (Aug 2008)

Inside this issue:

Happy Holidays & Best Wishes

At the Fungis Annual General Meeting on August 15, 2008 during the Annual Conference the new Fungis Executive Committee for the following year were selected, with the following appointments;

CHAIR: **Reuben Sinclair**

(currently resigned but business as usual - rotating Chair to take place until 2009 AGM to support Deputy Chair)

DEPUTY CHAIR: **Sharlene Blakeney**

SECRETARIAT & TRESURER: **Meagan Cross**

STATE GOVERNMENT REP:	**Liesl Harrold**
LOCAL GOVERNMENT REP:	**Laise Harris**
NATURAL RESOURCE REP:	**Jason Allen**
CULTURAL/HERITAGE REP:	**Rod Neilson**
RESEARCH/FEDERAL/CSIRO REP:	**Pertina Pert**
EDUCATION REP:	*Vacant*
SSI LIASON:	**Alistair Hart**

Reuben steps down as Fungis Chair…

On behalf of the Fungis executive committee and membership I would like to take this opportunity to say a big thanks to Reuben for the past 8 years support as both chairperson and a member of the Fungis group. His commitment to the group has gone beyond what is required or expected of the chairperson and has ensured that Fungis remains the leading GIS support group in Far North Queensland. Whilst he has resigned as chair he is still a member of the group so I'm sure we will be hearing more from him in the future. We wish him well in all his endeavors (personal and work) and hope to see him back north in the New Year.

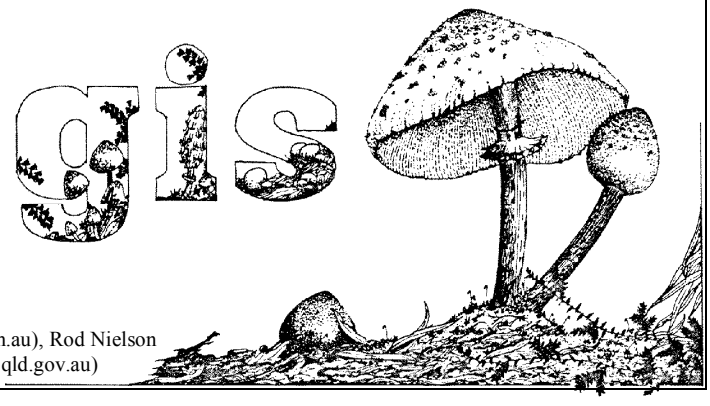
Sharlene (Deputy Chair)

Celebrating 20 Years of FUNGIS

ABOVE **From NR&W**
An ancient Babylonian tablet (circa 600BC) showing a representative map of Babylon, the Euphrates River and a surrounding ocean
http://pw1.netcom.com/~aldawood/tablets.htm

LEFT **From Mike Stott, WTMA**
A photo of Mike Stott back in 1989 when with '1Topo Survey Squadron' picking up satellite signals on top of a hill in the middle of nowhere in Cape York. We had to lug the Magnavox & peripheral equipment, plus two truck batteries to power it all, up a small mountain top. We had to sit on the hill for 3 nights to collect satellite info for our position …..Today's equivalent 20 yrs on is the hand held GPS.

Fungis



Photos Provided by Bob Peever (bpeever@bordernet.com.au), Rod Nielson (gis@girringun.com.au) and Mike Stott (mike.stott@epa.qld.gov.au)

Fungis celebrates 20 years of sharing spatial knowledge and innovation

Article Provided by Reuben Sinclair (reubensinclair@gmail.com)

Over the day and evening of Friday 15 August 2008 it was with much enthusiasm that past and present members and friends of Fungis came together to celebrate their history, the achievements and plan for the future. The traditional Fungis fine fare and fun was enjoyed by all….naturally.

Over the past 20 years the Far North Qld GIS Group Inc (Fungis) has strived to develop and promote the application of spatial technologies across the broader community and influence government policy relating to the provision of spatial information. 'It was great to see another successful annual gathering of members and industry sponsors' Fungis Chairman, Reuben Sinclair said. 'The fine array of presentations at the event really highlighted how far we have come in taking the benefits of this technology to where it can start making a real difference with real outcomes for the people and country of Northern Queensland'.

Showcasing the leadership and innovation amongst the Fungis membership attendees were presented with a broad cross-section of spatially enabled projects achieved or well underway across the region. Spatially tooled schools, cultural heritage mapping, pest and weed data collaborations and advanced GIS enterprise for natural resource and fire management were all part of this knowledge sharing event.

'Through the foresight of our founding members and the tenacity of our industry champions we are setting high standards and truly are at the smarter end of the State' Reuben said. 'We are grateful for the continued sponsorship from the commercial sector, particularly from ESRIAU, Pitney Bowes, ATGIS and Measuretek'. Without industry support we would struggle to deliver events of this quality. Our growing relationship with the Spatial Sciences Institute has also been of value to members of both organisations with our regular workshops now recognised for continued professional development'.

With members far flung across the north and beyond Fungis continues its collective effort in supporting organisations and individuals using emerging GIS and GPS technologies, through regular events, user forums and representing the industry to government. Don't be left in the dark and visit www.fungis.org today!

Photos Provided by Bob Peever (bpeever@bordernet.com.au) and Rod Nielson (gis@girringun.com.au)

FUNGIS news— More Conference Photos

Photos Provided by Bob Peever (bpeever@bordernet.com.au) and Rod Nielson (gis@girringun.com.au)

Yalanjiwarra Jalunji Marrjanga Aboriginal Corporation Cultural Heritage Recording Project.

Article Provided by Bob Peever (bpeever@bordernet.com.au)

Yalanjiwarra Jalunji Marrjanga Aboriginal Corporation (YJMAC) represent the cultural interests of the 5 Eastern Kuku Yalanji Clans whose traditional lands span the area between the coast and Great Dividing Range from Pretty Beach to the Annan River south of Cooktown. YJMAC received funding from The Christensen Fund, one of the pre-eminent private foundations in the United States focusing on traditional custodians, to begin recording the physical sites of the clan lands & whatever cultural knowledge the Elders wish to pass down to the generations to come.

It is a unique project in that the Traditional Owners direct the project, and have been working in partnership with TNQTAFE Mossman to hold the course training Eastern Kuku Yalanji people how to record significant sites and other relevant information, such as boundaries, walking tracks, mens' and womens' sites, etc while also interviewing the Elders regarding those sites plus knowledge of places, stories, histories, myths etc. Of course such recording could have been achieved without formal training to National standards, however the discipline of such training provided structure, and the opportunity for students to acquire a Certificate 3 in Conservation and Land Management, a nationally recognized qualification, which ensures transferable skills, and provides credibility to future work undertaken by the graduates. In addition the careful selection of subjects has also provided an opportunity for students to build on their academic work to achieve a Certificate 3 in Spatial Information Systems.

The project has been achieved through a combination of generous participation of the elders, multimedia, and spatial skills. Traditional knowledge is intrinsically entwined with the natural environment, which with infrastructure has been extensively mapped over the Eastern Kuku Yalanji traditional land, this mapping now existing in GIS format. There should have been no surprise that this combination of traditional information and GIS technology highlighted the rational for the Traditional Owners practices.

RIGHT:Here Patrick Peever, in a typical "classroom" situation takes the students through the EPA RE mapping at this particular location, while on the far left, partly obscured Elder George Kulka looks for additional information in the form of insects to enhance this site information. Traditional Owners view everything as being significant to the cycle of life and recording of each site was all inclusive involving everything even insects, and weeds. Standing in the background is Steve Bright from TNQTAFE, doer of everything, here ensuring TNQTAFE's standards were adhered to. The traditional dialect of the Eastern Kuku Yalanji people has survived and is spoken fluently enabling traditional language to be included in the information recorded.

Naturally it also included scientific aspects such as evaluation of the Orange Footed Scrub Fowl egg as demonstrated by student Eileen Burchill.

It is a basic scientific principle to measure an item of interest, however it was astounding how much additional information could be established about this egg through traditional knowledge. Overnight this egg was eaten by a goanna, and the cycle of life continued.

To assist with sites reflecting previous occupation through the presence of such items as fire places and artifacts Rod Nielson, the Spatial Information Manager at Girringun Aboriginal Corporation, traveled up from Cardwell to generously share his knowledge.

LEFT:Rod, pictured, is no stranger to the Cultural Heritage Recording "classroom" and is pictured here sharing his knowledge, on the recording of an archeological site.

RIGHT:This is one of my favourite photographs taken at the end of the day, and demonstrating that no timetable can be set for the educational experience. An elder, Fred Baird, followed by a group of students is going fishing.

It is believed that cultural recording and mapping will inspire and deepen personal and community understanding of traditional knowledge of language, ethics, histories, stories, culture, bush food and medicine, diet, clan lands, sites, fauna and flora, land management practices and resources.

Such knowledge will support and strengthen the communities and encourages appropriate respect and recognition of the Traditional Knowledge Holders, and of the lands of which they are the Traditional Custodians.

Those involved have seen real growth in the students, deepening self esteem and self reliance as they experience the value of their people, land & culture, and the contribution of the skills that they have been learning and will continue to develop through the continuation of this project.

The ABC news item providing additional information can be viewed at;
http://www.abc.net.au/news/video/2008/11/25/2429220.htm

Photos Provided by Bob Peever (bpeever@bordernet.com.au)

Indigenous mapping is a powerful tool used by indigenous people worldwide to achieve their goals to mobilise the indigenous information base and restore cultural connection to a place

Aboriginal Cultural Heritage

Article Provided by Rod Nielson (gis@girringun.com.au)

On the 24th of November the ABC News website posted an article, about Aboriginal groups turning to technology to help maintain their cultural heritage, called "Indigenous culture preservation goes high-tech" (http://www.abc.net.au/news/stories/2008/11/24/2427659.htm). The article referred to training for the Yalangi people which was organised by TAFE Queensland and was attended by Bob Peever (TAFE) and Rod Nielson (Girringun Aboriginal Corporation).

However while recording cultural site information into a database is one thing, access to and use of GIS is another issue, which is almost entirely limited to how to import and view GPS data, and how to perform basic analysis using the GPS data with whatever other data is available.

The importance of access to and maintenance of spatial data is something that, as GIS professionals, we are all aware of (regardless of how well we achieve it). Take this scenario into an Aboriginal setting where people have had, at best, limited training about GIS, less about data maintenance and are only using their systems infrequently and in a short time out-of-date data issues will occur.

Web map and internet mapping systems and servers (WMS & IMS) can provide answers to the data access and maintenance issues. WMS and these systems of access to GIS data allow the visualisation of data with an ability to perform some analysis while ensuring access to the most up-to-date data available. The issue of ongoing data maintenance is taken care of by the data custodian (or host) rather than the end user.

Now of course this raises issues of intellectual property and privacy and a whole Pandora's box of other issues, but lets remember that we're coming from a cultural mapping perspective only at the moment. Like all advances in technology some issues will need to be dealt with on the fly. Until Aboriginal groups either have their own people trained to a higher level or recruit GIS professionals and gain access to more advanced GIS software application, their data requirements will be fairly simple. Of course there will still be a need for data access and use agreements and there will need to be limitations to certain data as there has always been, but access to base data will always be necessary.

It seems that WMS and the like is the way of the future for a significant amount of GIS data, whether there are fees for use of other agreements are made. In the GISCafe Weekly Review 24-11-08, Michael McCarthy, senior director of Business Development & Sales Operation of DigitalGlobe, was recorded as saying:

> *The convergence in technology today means that you should be able to work in ArcGIS and pull in Virtual Earth or your own data, or a web service or imagery from DigitalGlobe. All the user cares about is, can I get coverage of data for my area? They should have a choice and as many data selections as possible.*

Of course I would add other data providers to the comment including all levels of government. Given the frequency of the updates to data like the DCDB and the frequency of its use by all of us, wouldn't it be nice to know that we're always using the most up-to-date version. Again back the Aboriginal community and the need for more that just Lot Plan information from the commercially availably available CDs. Information such as tenure, lot type (road, watercourse, etc) is important when planning cultural surveys and whether access to sites is possible.

More organisations are providing access to data via the web. Geoscience Australia hosts a web portal which is accessible through ArcGIS. Other organisations are also in the process of creating web-mapping portals which provide access to data from various data libraries, e.g. the Risk, Resilience and Response Atlas currently being developed by the Reef Rainforest Research Council in collaboration with the Australian Institute of Marine Science and other partners.

The Queensland State Government currently maintains a similar system, the NAPRIS Portal, which was developed for use by the Regional NRM bodies as a way to access data and as a place to post their own data. Unfortunately the funding for this project was not continued and the NAPRIS Portal sits little used but with the potential to serve Government data, under licence (there may be different levels of licence) to Aboriginal groups who are beginning down the road of maintaining their own cultural heritage databases.

The sky, or rather the internet speed to the GIS computer, is the limit at the moment with this medium for information dissemination. With most of the system already in place there just needs to be a desire for (and I don't like to use the term) the Smart State to get the jump on the rest of the country and lead the way into the future.

NEWS: Santa requests spatial data across Northern Queensland!

Due to continuing global development and population growth, the famous navigational routes taken by the reindeers for Santa's Christmas Eve deliveries will no longer be sufficient to ensure complete coverage of the world's population. The elves are currently seeking the provision of data globally to aid in enhanced planning and efficiency of the huge undertaking of delivering presents to every boy and girl across the globe - in just one night. The confidential nature of land ownership information, combined with the classified route that Santa travels makes the data exploration and collation a significantly more difficult task.

Time-zones aid in the success of this huge venture and with increasing capacity in navigation systems and better quality survey data and GIS planning available, it is likely that Santa's collective can effectively complete their mission once again. Population growth will continue to put increasing pressure on Santa to continue his generous and festive yearly tradition, however it is hoped that better planning of the tasks undertaken will aid in increasing productivity and delivery of presents with decreasing resources, and of course current financial pressures and the rising cost of reindeer food.

Santa has a plethora of GIS software and surveying equipment generously provided by Industry leaders to ensure his successful utilization of global data. Any additional data you could provide will be greatly appreciated as the data coverage over remote places like Far North Queensland is still disparate and continuously being increased and improved. I urge all those who may be able to provide Santa with value-adding data free of cost to contact the North Pole immediately.

Santa's email address is santa@santaclaus.com

Fungis end of year Christmas drinks.

Article Provided by Alistair Hart (mangoesmapping@westnet.com.au)

Last week Fungis members got together and celebrated the onslaught of the festive season in the tropical heat at the Kuranda Hotel (the Bottom Pub!) following the November Fungis Executive meeting.

Contrary to the pubs nickname, there weren't too many bums on seats during our celebration, but the quality of attendees (excluding the fly that 'dropped' in) helped to compensate for the lack of numbers!

Yummy Dipping Sauce!

All members (and the general public) are welcome at Fungis events. Members are encouraged to attend Fungis committee meetings when they can, to learn the inner workings of Fungis and identify where they can help to bring some of our activities to fruition.

Super Crispy Crackers!

Keep an eye on your emails and the Fungis website (www.fungis.org) for information about upcoming Fungis events.

For information on future Fungis committee meeting locations and dates, refer to the Committee News page in the members section of the Fungis website: www.fungis.org

Photos Provided by Rod Nielson (gis@girringun.com.au)

Spatial Sciences Institute

Interesting Positions – June '08

Brought to you by the Spatial Information & Cartography Commission of the Spatial Sciences Institute

Special welcome to the 145 new SSI members (including the 30 with a primary interest in SI&C Commission) that have joined since January 2008 !

DATE CLAIM - "Location Intelligence for Business Seminar" Sponsored by SSI SI&C Commission, September 8, Brisbane.

Creative Commons licensing - Australia unlocks the potential of geospatial data
Approving the free re-use of copyright geographical and meteorological data, the government of Queensland has set a new trend which will be closely watched by the global free-data movement, particularly so in Britain. This move aimed at removing the barriers for data sharing during an emergency situation are a result of a study which indicated an annual A$ 12bn loss to the economy due to confusing government policies.
http://www.guardian.co.uk/technology/2008/feb/14/freeourdata.intellectualproperty?gusrc=rss&feed=technology

The value of spatial information
The emerging Australian industry is worth $A1.4B, and contributes $A12.6B to GDP
http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_poiqkhwfsv&section=News
http://www.crcsi.com.au/UPLOADS/PUBLICATIONS/PUBLICATION_323.pdf
http://www.crcsi.com.au/UPLOADS/PUBLICATIONS/PUBLICATION_324.pdf

Web based map room
A commercial map storage portal for public/private use provides 1gb free storage
space and viewing tools
http://maproom.geospatial-online.com/PNOnline/

Enterprise GIS strategies strengthen government operations
Local and state departments of transportation, public safety, social services, planning and environmental agencies in the US have long reaped the benefits of GIS with increased efficiency, productivity and better service delivery.
http://www.govtech.com/gt/articles/265061?utm_source=newsletter&utm_medium=email&utm_campaign=GTEN_2008_3_27

Nokia predicts it will sell 35 million GPS phones this year
35 million phones from one manufacturer with GPS is a lot. That number is just under 10% of all Nokia phones sold during 2007 (~400 million). This prediction is a clear indicator that GPS and navigation/location services will play an increasingly important role moving forward
http://www.informationweek.com/blog/main/archives/2008/03/nokia_predicts.html?cid=nl_IWK_daily

Put your city on the 3D map
Engage the public by featuring your city's buildings, landmarks and terrain on Google Earth
http://sketchup.google.com/3dwh/citiesin3d/index.html

US military puts 'bat' spies in the sky
The US Army wants a six-inch spy plane to gather data on sights, sounds and smells in urban combat areas
http://software.silicon.com/applications/0,39024653,39170402,00.htm?r=1

New optical clock promises increased accuracy Researchers from the National Institute for Standards and Technology (NIST) in the US have built an optical clock that promises to be the world's most accurate
http://physicsworld.com/cws/article/news/33295

Earth's rotation may account for wayward spacecraft
A mysterious phenomenon causing small, unexpected deviations in robotic spacecraft trajectories near Earth may be a step closer to an explanation
http://space.newscientist.com/article/dn13411-earths-rotation-may-account-for-wayward-spacecraft.html?feedId=online-news_rss20

Historic Australian atlas series now online
Geoscience Australia is re-releasing a range of atlases that depict the changing face of the Australian environment and resources over time
http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_ehxbtspmkl&Ezine=mar0308&section=News

ESRI has won a contract with Greater London Authority (GLA) to provide a corporate GIS solution that will help provide London's citizens with better access to local information and improve data information sharing between its primary stakeholders.
http://www.publictechnology.net/modules.php?op=modload&name=News&file=article&sid=13905

Bringing JPEG 2000 into the GeoWeb
JPEG 2000 (JP2) is quickly becoming an accepted file format for storing large amounts of geospatial imagery. http://gismap.geospatial-solutions.com/gssgismap/Web-Based+GIS%2FOpen+Standards/Bringing-JPEG-2000-into-the-GeoWeb/ArticleStandard/Article/detail/381763?contextCategoryId=37561

RADARSAT-2 products commercially available
RADARSAT-2, a commercial Synthetic Aperture Radar (SAR) satellite, completed commissioning April 25, 2008, and is now in full commercial operations. http://www.radarsat2.info/

Satellite-based augmentation system (SBAS) in Japan
Japan's satellite-based augmentation system has brought meter-level accuracy to that region, but there are even centimetre-level options available that take advantage of Japan's MSAS
http://sc.gpsworld.com/gpssc/article/articleDetail.jsp?id=510242

Enterprise GIS strategies strengthen government operations
The majority of governments in the United States have documented successes with GIS
http://www.govtech.com/gt/265061?id=&topic=117676&story_pg=1

Google mapping spec now an industry standard
Members of an industry group called the Open Geospatial Consortium have approved Google's KML technology as an open standard for describing some geographic data
http://www.news.com/8301-10784_3-9917421-7.html

New version of Live Maps and Virtual Earth 3D
The latest version of Microsoft Live Maps is online. http://maps.live.com/

Growth in mobile LBS market
A new report from Berg Insight, Sweden, a telecom research firm, predicts that by 2012, more than 100 million mobile subscribers in Europe will use LBS (location-based services). Berg popular applications will include mapping, navigation, search, social networking, and tracking.
http://www.specialtypub.com/m2m/article.asp?article_id=6679

Top causes of errors in online mapping systems
Causes of internet map errors range from digital mapping methodology, data errors, data interpretation errors, usability errors, and errors in interpreting user queries.
http://searchengineland.com/080407-180651.php

Jules Verne using GPS to get around – in space
GPS can be used for more than terrestrial navigation, as the European Space Agency's (ESA) unmanned automatic transfer vehicle, Jules Verne, is proving
http://mg.gpsworld.com/gpsmg/Latest+News/Jules-Verne-Using-GPS-to-Get-Around-ndash-in-Space/ArticleStandard/Article/detail/507310?contextCategoryId=33824

Gary Nairn turns IT adviser
Former Special Minister of State Gary Nairn has reinvented himself as an IT consultant
http://www.australianit.news.com.au/story/0,24897,23478058-16123,00.html

OpenStreetMap - The Free Wiki World Map
OpenStreetMap is a free online map of the whole world editable by anyone. The implications of this are interesting.
http://wiki.openstreetmap.org/index.php/Main_Page

Wired city will include the dead
Grave map boosts city's online presence
http://www.canada.com/vancouverisland/nanaimo/news/story.html?id=31af01f0-a521-48e1-9c36-7b0f0f0c5b8e

Satellite images reveals illegal Murray-Darling irrigation
A new report has exposed major flaws in the management of key rivers and flood plains along the Murray Darling Basin
http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_zujdxiewsf&Ezine=mar0308&section=News

Paper maps being phased out
By the end of the year, the twelve-person cartographic unit of California State Automobile Association. will be disbanded. The cause for the demise is the widespread availability of online map directions and in-car navigation units which cut demand for the paper maps by 13% in 2007...
http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2008/05/26/BUOE10S5V4.DTL&type=tech

Mission to prove Europe's sat-nav
Europe's quest to build its own version of GPS is about to take an important step forward with the launch of a test spacecraft, Giove-B
http://news.bbc.co.uk/2/hi/science/nature/7359079.stm

Map reading for dummies
A huge European project into car and road safety has developed a system that will read satellite navigation maps and warn the driver of upcoming hazards – sharp bends, dips and accident black spots – which may be invisible to the driver. Even better, the system can update the geographic database. Suddenly, all drivers can become mapmakers
http://cordis.europa.eu/ictresults/index.cfm?section=news&tpl=article&id=89644

Imagery for Everyone
By the end of December of 2008, both incoming Landsat 5 Thematic Mapper data and all Landsat 5 TM data acquired by the USGS since launch (1984) will become available, with all Landsat 4 TM (1982-1985) and Landsat 1-5 Multi-Spectral Scanner (MSS) (1972-1994) data becoming available by the end of January 2009. All Landsat data purchasing options from the USGS will be discontinued by February 2009, once the entire Landsat archive can be accessed at no charge
http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_augvblkpgy&Ezine=apr2808&section=News

India launches 10 satellites in one go
India has successfully launched 10 satellites into orbit from a single rocket, setting a new record
http://www.itnews.com.au/News/75005,india-launches-10-satellites-in-one-go.aspx

UN confirms Australia's extended marine jurisdiction
Australia's submission for jurisdiction over an additional 2.5 million square kilometres of seabed has been confirmed by the United Nations Commission on the Limits of the Continental Shelf.
http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_dyixtpnhjk&Ezine=apr2808&section=News

Google diving into 3D mapping of oceans
The company has assembled an advisory group of oceanography experts to create a 3D oceanographic map
http://www.zdnet.com.au/news/software/soa/Google-diving-into-3D-mapping-of-oceans/0,130061733,339288599,00.htm?feed=rss

GRASS GIS releases version 6.3.0
GRASS is currently used around the world in academic and commercial settings as well as by many governmental agencies and environmental consulting companies GRASS differs from many other GIS software packages used in the professional world in that it is developed and distributed by users for users, mostly on a volunteer basis, in the open, and is given away for free
http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_eohadzmrju&Ezine=may0508&section=News

PowerPoint based presentations for GIS
Find ready-made and available for download PowerPoint presentations online. PowerPoint presentations can be valuable tools in presenting GIS ideas or as educational materials...
http://gislounge.com/powerpoint-based-presentations-for-gis/

Google and ESRI to form alliance
A development full of implications for the spatial industry
http://apb.directionsmag.com/archives/4293-GoogleESRI-Announcement-in-Plain-English.html

California creates GIS Task Force
Gov. Arnold Schwarzenegger has asked for a task force to be created to help agencies and departments improve their use of geographic information systems
http://media-newswire.com/release_1066663.html

URISA's GISCorps working on Myanmar cyclone recovery efforts
GISCorps has begun the process of recruiting and identifying volunteers to assist with the compilation of infrastructure damage data in Cyclone affected areas in Myanmar
http://www.govtech.com/gt/323386?topic=117676
http://www.giscorps.org/

Digital mapping
The next 20 years will see online mapping systems such as Google Maps completely replace their paper counterparts according to a leading digital entrepreneur
http://www.nebusiness.co.uk/business-news/technology-news/2008/05/22/thinking-digital-conference-digital-mapping-51140-20961279/

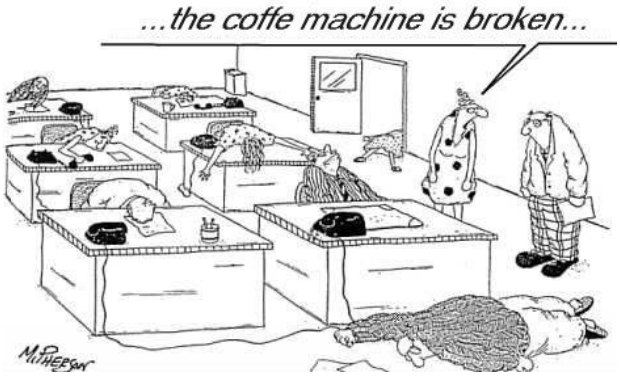
SSI Northern Group Young Professional's Social Event

Article Provided by Carl Schedlich (carls@atgis.com.au)

On Friday 14th November a SSI Young Professionals social event was organised by two Fungis members; Matt Emmerson (Department of Main Roads, Cairns SSI YP Representative) and Carl Schedlich (Atherton Tablelands G.I.S., Atherton Tablelands SSI YP Representative). Around 10 young spatial professionals attended the event, held at the Green Ant Cantina in Cairns. After spending a few hours networking over some relaxed drinks and finger food, the group moved on to other bars in the Cairns CBD. The SSI YP representatives hope to organise another event for young professionals in early 2009. Those Spatial professional aged 36yrs and under are encouraged to attend these events as it is not a requirement to be a member of SSI, and the focus is on networking and socializing for the younger spatial community in Far North Queensland.

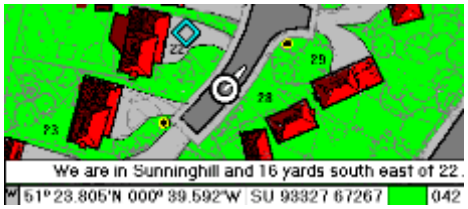
Photos Provided by Carl Schedlich

Some Office Jokes to keep you amused...



GPSS from Sunninghill in the UK - "first, best and lowest cost GPS Software in the World" - undisputed in over ten years

FREE GPS Software and mapping for navigation on Laptop, Pocket PC and Smartphone.
maps for 163 countries - to street level for all the USA; voice guidance in 12 languages.
Updated 0930 Wednesday 19th November 2008 UK time
Don't feel bad about not paying for GPSS. Very few non-business users do :-)
Over 160 people download GPSS each day.



Get Information on how to navigate with this GPS software and a GPS unit. Then download GPSS and run it on your PC. It will give demonstrations of what it can do. Run it on a Laptop with a GPS, and this same GPS Software will work for real. Need a GPS? Advice is available on all platforms. Get free support, mapping for 163 countries and voice guidance in 12 languages. This includes free street level mapping for all the USA. Over 10,000 people who have tried GPSS with GPS are on available on the links pages of the website. Those with a business interest in GPS should visit the business page.

GPSS Baseline v6.92 includes GPSSppc v11 for Pocket PC based GPS and Smart-phones. There is a User Guide for GPSSppc available. Techys can add mapping to GPSS. Information on geocaching, and much much more. See Maps from Images and use of Google Earth. HAMs see Radio and RDF pages.
***"It's like having a little friend in the car with you" :-)* - try speech input.**
***"Speed Trap ! Watch your speed !"* - see the speed warning page.**

Try the new GPSS Message Board and share GPSS experience with others. See AVL/CHASE page for fleet management and security applications. This GPS tracking software can track and control multiple vehicles from a fixed or mobile PC, by use of mobile 'phone, radio or satellite communications. The objects tracked may be many miles away, but seen on mapping for 163 countries - right down to "house level" maps. GPSS can also be used in "chase" mode, guiding the driver to a mobile target. GPSS has pioneered PC based navigation and remote tracking for the police, military, business and the public, since 1995.

Robin Lovelock, Sunninghill Systems, 22 Armitage Court, Sunninghill, Ascot, Berks SL5 9TA, United Kingdom.
Sunninghill Systems International Limited and Sunninghill Software Limited are registered at the above address.

Information sourced from www.gpss.co.uk

ALL HAZARD SYMBOLOGY—EMERGENCY SERVICES MAPPING

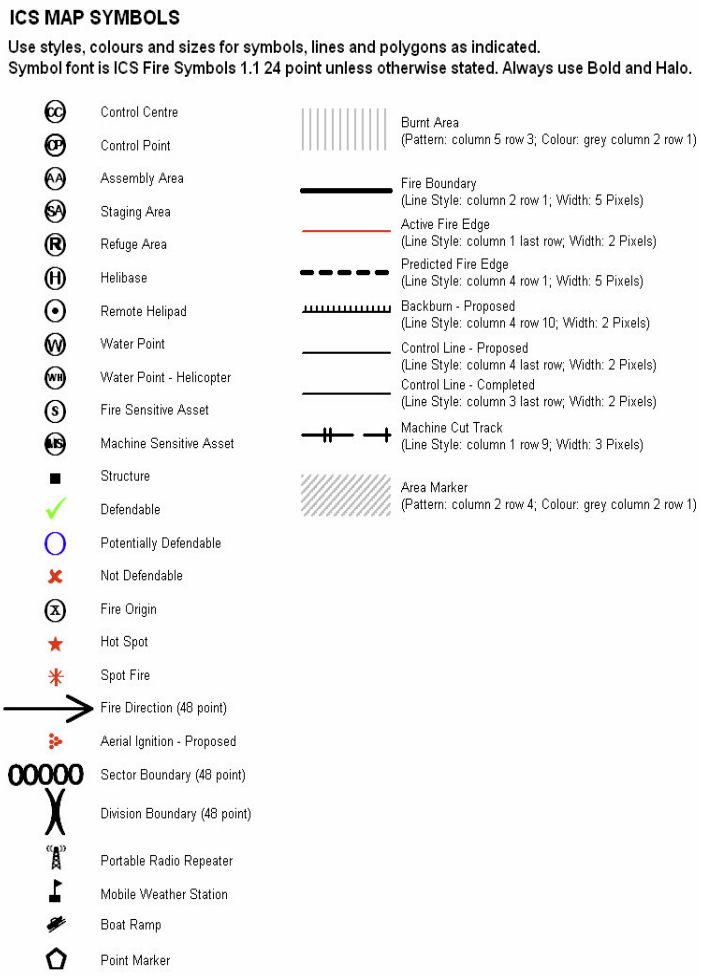
Report Produced by Spatial Vision Innovations for the Intergovernmental Committee on Surveying and Mapping (ICSM), Australasian All-Hazards Symbology Project (info@spatialvision.com.au)

Within Australia, there is currently common national standard for map symbols used to represent features relevant to responders to emergencies, law enforcement or counter terrorism.

Many emergency events, especially large scale incidents, cross jurisdictional and geographic boundaries. Often in these circumstances, personnel from different agencies and jurisdictions are brought together into a single command structure. It is important for these people to be able to absorb information quickly. Maps play a vital role in summarising and describing a situation. It is well accepted that map products that use a standard set of symbols that are readily understood by all emergency management personnel at all levels of the incident management framework contribute to increased efficiency and safety.

ANZLIC – The Spatial Information Council, in association with the Intergovernmental Committee on Surveying and Mapping (ICSM) want to encourage consistency in how All-Hazards events are depicted on maps and aim to develop a consistent Australasian All-Hazard symbology set and have it adopted by emergency management agencies across Australia and New Zealand. In the medium term, the symbology set would be further developed to support agencies leading responses to law enforcement and counter terrorism.

Spatial Vision was commissioned to document the outcomes of an audit of mapping symbols used by emergency management agencies and to recommend a framework for Incident Management System (IMS) and all-hazard symbols and an initial set of symbols to largely satisfy Emergency Management requirements. In undertaking the project, Spatial Vision widely consulted with key representatives of the emergency management and national security sectors through five workshops held around Australia; a national teleconference including New Zealand; meetings with Federal agencies, and an audit questionnaire sent to 49 agencies of which 26 responded.



The audit results indicated that most agencies (81%) use the Australian Inter-service Incident Management System (AIIMS), as the basis for their IMS. AIIMS was developed in the 1980s and included a limited set of mapping symbols mostly aimed at bushfire response. The AIIMS map symbols are of limited application to many agencies, only 62% used them, mostly bushfire response agencies, and all of these agencies needed to expand the symbol set beyond the limited range. The audit revealed a high level of consistency within jurisdictions in relation to the symbols used for IMS which reflected a significant level of cooperation between agencies, particularly fire related agencies, at the state level.

For example, in South Australia, there is a common symbol set used between the Country Fire Service and the Department of Environment; whilst in Victoria, there is also a high level of consistency between the Department of Sustainability & Environment and the Country Fire Authority, and in NSW between the Rural Fire Service and the Department of Environment & Conservation.

Figure 7: Jurisdictional Map Example

The results of the audit also revealed differences between jurisdictions in relation to both AIIMS and non-AIIMS IMS symbols. Examples of these include symbols for refuge areas, threatened assets and base camps. In addition to the physical differences in symbology, the audit process revealed a number of differences in terminology associated with symbols. There were significant variations between agencies such as local government, search and rescue, police, health and environmental agencies on what constitutes features such as a 'staging areas', 'control areas' and 'control points'. These differences in definitions impact the ability to create usable map based products for use in multi agency incidents. Clearly, there is no comprehensive common approach to symbols in use within Australia.

On the international scene, the most recognised standardised approach to emergency management mapping symbology is provided by the United States Federal Geographic Data Committee (FGDC). The FGDC Homeland Security Working Group (FGDC HSWG) established the Symbology Sub-group which developed a symbology set commonly referred to as either the US Homeland Security symbology library or the FGDC symbology library. The symbology library was designed to be used by the emergency management and first responder communities at all levels of need (i.e. National, State, Local and Incident). Although the specific symbols within the US Homeland Security symbology library have been designed for use within the US, there are a number of characteristics of the symbology set which are of interest to other jurisdictions.

These characteristics include:
• Defined categories that are differentiated by frame shapes. Diamonds, circles and rectangles are used to visually classify the symbols into their respective groups (Incidents, Natural Events, Operations, and Infrastructures)
• Border patterns to provide further information on a symbol level
• Designed for use in digital and paper map products
• Designed to work across a range of (but not all) scales.
• Designed for use both in black and white and colour (eg while a coloured symbol frame can be used, the pattern of this frame also denotes the level of damage or operational status).

At this stage, the scope of the FGDC symbology set is limited to point symbols. However, it is expected to expand at a later date to include lines and polygons. The US Homeland Security symbology library has been formally recognised as an ANSII Standard.

Figure 6: Regional Map Example

The objective for the Australasian All-Hazards Symbology standard is to define a symbology framework that will support emergency management across jurisdictions, agencies, hazard types and technology platforms. To be successful, the symbology framework must reflect the requirements of the emergency management community and be presented in a form that they can readily adopt.

Consultation undertaken to identify the requirements for an Australasian All-Hazards Symbology standard revealed the strong need for the symbology framework to cater for all levels of practice: Jurisdictional Coordination; Regional Coordination and Event/Incident Coordination

QUEENSLAND
SPATIAL EXCELLENCE AWARDS

Article Provided by SSI Queensland QSEA 2008 (http://www.spatialsciences.org)

Queensland Spatial Excellence Awards

Celebrating Queensland's excellence in spatial information
The Queensland Spatial Excellence Awards (QSEA) are the state equivalent of, and lead into, the Asia Pacific Excellence Awards (APSEA).

QSEA provides the opportunity for spatial information projects and professionals in the industry to showcase their achievements and demonstrate the Smart State in action. QSEA is a celebration of the achievements of top spatial information enterprise in Queensland. Projects and professionals attaining recognition at this premier event are deemed outstanding achievers and pre-eminent in their field.

Individual Awards

Education and Professional Development was awarded to Dr Peter Gibbings, Senior Lecturer in Faculty of Engineering and Surveying at the University of Southern Queensland. Currently studying for his Doctorate of Education at the Queensland University of Technology.

Service to the Spatial Community was awarded to Mark Allen, an outstanding professional whose leadership in his own career has led him to the rank of Major in the Australian Army (on short commission), and high levels of delegation in his position at DPI Forestry. Mark is now with GHD.

Young Spatial Professional of the Year was awarded to Michael Krome and Lisa Dykes

Spatial Professional of the Year was awarded to Adella Edwards, a cartographer at James Cook University in Townsville, and is extremely active in her roles on external forums such as the Australian Map Circle, Standards Australia and FUNGIS.

Tertiary Spatial Student was awarded to Dr. Kalum Priyanath Udagepola

Photos Available for viewing and purchase at http://members.optusnet.com.au/kirklandphoto/

Industry Awards

Category of Infrastructure and Construction was awarded to QASCO Surveys for their project "Skilled Stadium"

Category of Land Development and Planning was awarded to AAMHatch for their project "Hong Kong 3D City Models with LiDAR"

Category of People and Community was awarded to Queensland Regional Natural Resource Management Groups Collective for their project "Spatial Imagery Capture Project - GPS and GIS Training Program 2006 - 2008"

Highly commended for People and Community were Atherton GIS for their project "Northern Queensland Wildfire Mitigation Project" and SIBIZ for their project "New South Wales State Emergency Services MapBook"

Category of Research and Innovation was awarded to North Surveys for their project "Linear Optimisation for Decayed Corrugated Culverts from Terrestrial Scanning"

Category of Resources and Environment was awarded to THG Resource Strategists for their project "Bunya Road Rural Residential Community"

Category of Small Project was awarded to Searle Consulting NQ Pty Ltd for their project "Eumundi Project 3D Modeling"

ASIBA QLD Chair Award was awarded to Michael Easton.

The JM (Mac) Serisier Award was awarded to Queensland Regional Natural Resource Management Groups Collective for their project "Spatial Imagery Capture Project - GPS and GIS Training Program 2006 - 2008"

Eminence and Excellence was awarded to Tim Barker, the director of Queensland Spatial Information Office and the Assistant Government Statistician in Queensland Treasury. He is an outstanding professional who has worked tirelessly for the betterment of the spatial sciences since joining ISAQ and AURISA in 1987.

Photos Provided by Kirkland Photo (http://members.optusnet.com.au/kirklandphoto/)

World leading Australian research to save the Great Barrier Reef from climate change

Australian Institute of Marine Science Media Release - July 25, 2008.

The Great Barrier Reef is under threat from climate change, but there is hope: scientists and managers are working together to try to keep the Reef healthy. That was the clear message delivered this morning by Prime Minister Kevin Rudd and the Minister for Climate Change and Water, Senator Penny Wong, in Port Douglas, far north Queensland.

Ms Sheriden Morris and Dr David Souter from the Reef and Rainforest Research Centre (left) demonstrate the features of the Reef Atlas for Prime Minister The Hon. Kevin Rudd and Climate Change Minister The Hon. Penny Wong, with Member for Leichhardt Mr Jim Turnour MP and Principal Research Scientist Dr Katharina Fabricius (AIMS) looking on. Port Douglas, 25 July 2008.

The Prime Minister The Hon. Kevin Rudd, and the Minister for Climate Change and Water, The Hon. Penny Wong, standing in front of a banner for the Marine and Tropical Sciences Research Facility (MTSRF), discussing the impact of climate change on the Great Barrier Reef. Port Douglas, 25 July 2008.

The Prime Minister and Climate Change Minister were guided by Ms Sheriden Morris, CEO of the Reef and Rainforest Research Centre, as they inspected some healthy and unhealthy reefs at the Low Isles, just offshore from Port Douglas.

"Climate change is already affecting the Reef," Ms Morris said. "While it is easy to be overwhelmed by the array of environmental and economic problems that are being caused by climate change, it's important to remember that there are things we can do to mitigate or avoid these risks."

"Right now we're developing an innovative tool that is going to be critical in our fight to save the Great Barrier Reef - the Reef Atlas," she said.

The Prime Minister and Climate Change Minister were shown a trial version of the Reef Atlas which is funded from the Australian Government's $40 million Marine and Tropical Sciences Research Facility (MTSRF) program. The MTSRF is working collaboratively with scientists from the Australian Institute of Marine Science (AIMS) and the Reef and Rainforest Research Centre (RRRC) on the development of the Reef Atlas.

According to AIMS CEO Dr Ian Poiner, the Reef Atlas will be a one-stop shop on the web for data, information and analyses on contemporary environmental issues facing the Great Barrier Reef and its catchments.

"As threats from climate change, poor water quality and intensifying human use increase, the Reef Atlas will help assess their likely impacts and ways to mitigate them, ensuring that managing and conserving this invaluable natural asset is knowledge-based," Dr Poiner said.

Great Barrier Reef Marine Park Authority Chairman Dr Russell Reichelt has welcomed the initiative as a useful tool for reef managers. "The Reef Atlas will ensure the Great Barrier Reef Marine Park Authority is well placed to target management decisions to ensure the future health of the Reef," he said.

The Prime Minister The Hon. Kevin Rudd discusses the details of the Reef Atlas with (L-R) AIMS CEO Dr Ian Poiner, GBRMPA CEO Dr Russell Reichelt, and Member for Leichhardt Mr Jim Turnour MP. Port Douglas, 25 July 2008.

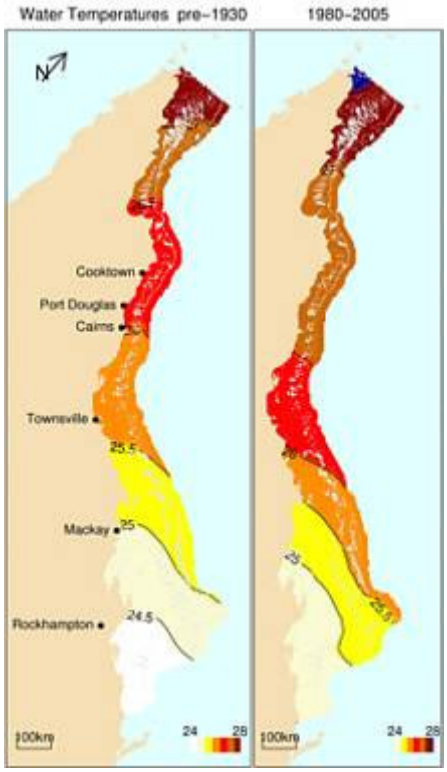
The Reef Atlas brings together decades of research on the Great Barrier Reef on reef and seafloor biodiversity, the abundance of corals, algae, fish and seagrasses, and water quality and sea temperature. As well as showing how reefs change over time, the Reef Atlas will also allow researchers to model likely future scenarios. It will assess how quickly reefs recover from disturbances such as coral bleaching and outbreaks of crown-of-thorns starfish, and what factors contribute to recovery.

Most importantly from a management viewpoint, the Reef Atlas will predict which areas are the most resilient or vulnerable, and determine the main drivers of change. The Atlas will continually evolve and its contents will be regularly updated as new information and improved tools become available.

When the Atlas goes live late in 2008, it will be able to answer questions such as:

- Where are the hotspots of coral biodiversity?
- What is the water quality in specific coastal regions?
- How is the reef being monitored and how is it changing?
- What are the main forms of use in the management zones of the Reef?

As Australia's leading tropical marine research agency, AIMS has supplied a large part of the science that backs up the new Atlas. A number of AIMS scientists have been involved in its development, including Dr Katharina Fabricius, Dr Glenn De'ath, Dr Eric Lawrey and Mr Stuart Kininmonth, working with Dr David Souter from RRRC and Dr Bill Venables from CSIRO.

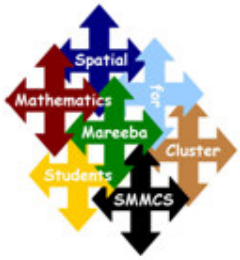


Water temperature.jpg: Sample output from the Reef Atlas, showing that warmer waters have moved south over the past 75 years along the Queensland coastline. This means that the average temperature of the waters bathing the Great Barrier Reef has increased 0.7 degrees C in the last century, with negative consequences for reef health. (Reef Atlas output derived from data supplied by AIMS)

Photos Provided by Suzanne Long, Reef and Rainforest Research Centre (RRRC)

What lies behind us and what lies before us are tiny matters compared to what lies within us. - Walt Emerson

Community and Industry Partnership improves learning outcomes for students



Article Provided by Reuben Sinclair (reubensinclair@gmail.com)

Spatial Mathematics for Mareeba Cluster Students (SMMCS) aims to enhance the core mathematics outcomes for students from rural and remote schools within the Upper Mitchell River Catchment. To achieve this we have developed innovative spatial awareness activities utilising resources supplied through a regional community and industry partnership.

The Mareeba School Cluster includes the following schools,

Chillagoe State School
MT Molloy State School
Dimbulah State School (P10)
Mutchilba State School
Biboohra State School
Mareeba State School
Mareeba State High School

The SMMCS project has been developed as a part of the Australian School Innovation in Science, Technology and Mathematics Project funded by the Australian Government Department of Education, Science and Training as a part of the Boosting Innovation in Science, Technology and Mathematics Teaching (BISTMT) Programme.

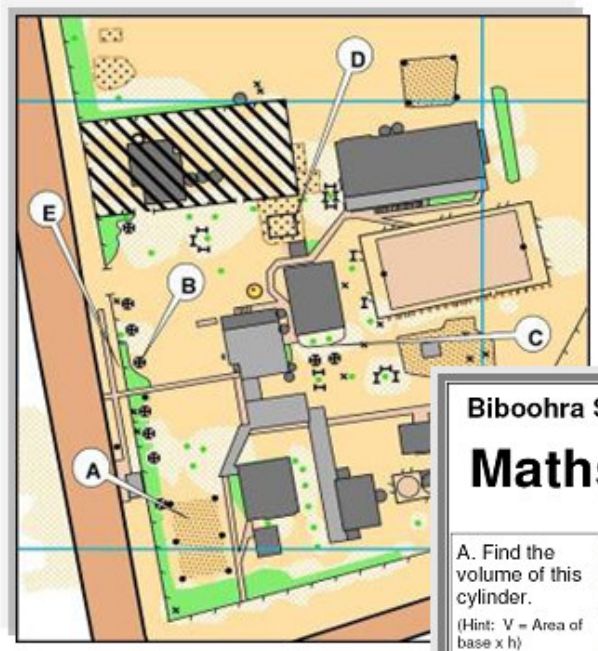
The challenge was to make complex technology simple to understand and disseminate.

The objective was to develop dynamic educational materials for each school and work with the teachers to create spatially based learning activities. Teachers needed to be able to introduce the materials into existing lesson planning but minimise the extra effort required to do so.

The result is a comprehensive range of student learning activities including,

1. Spatial comprehension trails
2. Maths, science and general knowledge trails
3. Orienteering and map reading exercises
4. Global Positioning System (GPS) navigation and data collection
5. Spatial technology (GIS - Geographic Information Systems) applications and career paths

Materials produced through SMMCS can be altered or interchanged to meet specific targets and age groups or used as templates for other curricular activities beyond mathematics and science.



Biboohra State School

Maths Trail

Following the teacher's instructions and using the equipment supplied (map, metre ruler), find answers to the following questions.

A. Find the volume of this cylinder.

(Hint: V = Area of base x h)

ANS

B. Use algebra to calculate what length of 70 x 45mm timber is needed to make one of these settings.

ANS

C. We want to build another rock wall like this one but 15m long.

i. How many brick tiles would we need to buy for the top?

ii. Approximately how many average sized rocks would we need?

iii. If the brick tiles cost $1 each and rocks cost $10/tonne (approximately 100 rocks per tonne), how much would the materials cost altogether?

i. ANS

ii. ANS

iii. ANS

D. How long do the bolts need to be to secure these handles to the ramp?

ANS

E. Which letters on this sign have one or more lines of symmetry?

ANS

Educators, spatial industry members and anyone with an interest in developing these resources for schools in their community can access the SMMCS project information and example activities at www.atgis.com.au/spatialschools.

Membership

- Currently there are around 100 members, mostly corporate
- How do we spread the energy so that GIS fringe dwellers are engaged as well as people who are skilled GIS users?
- Problem now: it's same four or five people who do everything
  - *Note that the Exec is constantly having to focus on meeting short term targets only – like getting the newsletters out.*
- There's a strong need to engage whole membership and deepen engagement
- Is there a body that can provide funds to coordinate awareness raising programs? Can we bring in advertising money?
- It was noted that the biggest problem is not money in the bank but vitality in the community

Ways to Revitalise

- Go back to a previous Fungis practice: anyone can put up a query, everyone responds.
  - *Could be done via web like Yahoo groups*
  - *Online blog that has search facility*
- Maybe there is an opportunity to help our members by inviting managers to come and see what benefits GIS can provide for their business.
- Awareness raising outreach – presentations to schools and other organisations
  - *Terrain has money (and the passion) for education in schools, what is required is technical support – perhaps FUNGIS and Terrain could work in partnership on this?*
- Invite school students to FUNGIS events – as an induction to the profession
- Encourage people to share information, for example, to give a presentation about current work
  - *Could have GIS in the Pub (like Science in the Pub and Politics in the Pub)*
  - *Casual meetings – "I want to talk about …, does anyone want to join me?"*
  - *People who aren't used to getting up and speaking could speak about their project in a time frame that suits them and get some feedback. Because it doesn't require a lot of work to set up this could happen a few times a year.*
- Help members to present reports using GIS – to increase public awareness

Engagement with the website

- Get more people to the website – open up more of the website to the general public
- Need small bite size bits from members e.g. have just tried new software – here are 10 good things / not good things about it.

Workshops and Events

- FUNGIS used to have a culture of supporting each other in innovating. Have we become too focussed on PD points for professional staff only?
  - *Workshop topics need to be accessible to lots of users not just techies*
  - *On the other hand it's important to ensure that workshops cover a balance of topics, for intermediate and advanced as well as basic skill levels*
  - *How to spread the energy so that fringe dwellers are engaged as well as central skilled people*
- Workshops are a practical way to get hands on technical stuff
  - *Specific purpose workshops e.g. photogrammetry*
  - *ESRI happy to try and organise technical workshops*
  - *Interactive is important*
- Workshops focussed on creating materials for teaching would be valuable
- When is the best time for workshops – in or out of working hours?
- It would be good to see members drive workshops, while the exec provides support

Relationship with SSI

- How does FUNGIS work with SSI?
  - *Combined conference – work together*
- Resource sharing with other groups e.g. SSI
- Reciprocal SSI/ Fungis member discounts??

Article Provided by Anne Stapledon (anne@clearwater.com.au)