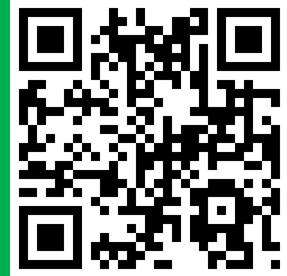


**Don't be left in the dark**

**November 2012**



Letter from the Chair	P.1
Fungis History Outline	P.2 - 4
Cairns Solar Eclipse	P.5
Opensource GIS	P.6
Fungis Funnies	P.6
Upcoming Events	P.7

Dear Readers,

## Letter from the Chair

Welcome to the second recent edition of the Fungis newsletter, thanks to the volunteer efforts and dedication of your marvellous editorial team!

This edition comes to you positively packed with eclipsarian excitement, as Cairns and the far north brace for what some might describe as a life-changing event, a total solar eclipse. Life changing eh...? Will it make metadata self-populate? Recent high-res. imagery free? Possibly not, but according to some, if you delve deep into the kernels of your soul, this event might just change the way you view your life.

As always, the 'where' is so important - where will you be on November 14th, when the total solar eclipse rolls into town? Just as importantly, where will you be two days later, when Fungis presents for your viewing pleasure the Smartphones and Spatial Applications workshop, giving you a rare insight into the twilight zone betwixt spatial information and smartphone applications?

This final Fungis event for the year will appeal to all as it presents information on current smartphone spatial apps, sticks a searchlight into the tunnel of darkness surrounding app creation and provides a rare glimpse into the emerging world of augmented reality. Learn how location aware apps are helping farmers and researchers, as well as how they are making life easier for all of us, as we pursue our own way of the spatial warrior.

Before all of this can unfold however, we need you to register, so get on board at [www.fungis.org](http://www.fungis.org) and rejoice in our end-of-year workshop (and the xmas drinks that are sure to follow)! Remember, workshop rego is discounted for members so make sure your membership is up-to-date by contacting [admin@fungis.org](mailto:admin@fungis.org).

Meanwhile, I urge you to marinade yourself in the rich, thick, sweet Fungis history that positively drips from the pages of this newsletter and think how you too can help Fungis make the spatial world a better place for all of us in the future.

Have a great end-of-year and see you soon!

Alistair Hart

## Editors Corner

The editorial team needs your help in developing upcoming issues of this newsletter which we hope to deliver to you every quarter. Please send us any fun pictures and articles relating to your work in GIS. After all it is not all just in front of the computer! We need funny stories about what people think GIS is, hair loss incidents from dealing with software and inspirational and innovative projects that you are working on, have seen online or at conferences.

### The Editorial team

George Corea, Sera Lambe, Anne Stapleton, Leigh Twine and Laise Harris

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

## *Continuing on from the Fungis history article in the last newsletter...*

1997 was another progressive year for Fungis with members contributed high calibre input to the emerging spatial industry in North Queensland.

- Warwick Sayers reported that Greening Australia were doing vegetation mapping between Gordonvale and Buchan's Point that should be concluded within six months.
- Wet Tropics' 1:50,000 series mapping was held up due to an aboriginal land claim.
- Terry Webb was heavily involved with developing a data base for the issuing of Forestry Permits that were currently in paper format, issuing of permits depended on the Foresters' knowledge of the area.
- Tony Dawson delivered GIS training to Year 11 & 12 geography classes, starting with students mapping Fitzroy Island.
- Tony also reported on the Department of Natural Resources (DNR) and Cairns City Council's (CCC) DCDB rectification project. The first area tackled was Mt Sheridan.
- The subject of a Fungis web site was explored and ideas for content were discussed during this year.

Sharlene Blakeney delivered the Treasurer's report at the 1997 AGM with a healthy bank balance of \$2,157.27.

During 1997-98, the executive committee consisted of:

President:	Peter Swain
Secretariat:	Sharlene Blakeney
Newsletter Editor:	Tony Dawson:
DNR Rep (Mareeba):	Peter Wilson:
Private Industries Rep:	Robert Crossley:
DNR Rep (Cairns):	Les Searle:
Sugar Industries Rep:	Alan Stafford:
Department of Employment Rep:	Warwick Sayers:
Wet Tropic Rep:	Terry Webb

1998 saw Fungis members working on projects that reinforced Fungis's eminent position in the spatial industry, especially in the North Queensland region. Alan Stafford worked with farmers to supply spatial data to aid in soil and fertiliser productivity reports.

Fungis identified the importance of data sharing across departments and Tony Dawson suggesting using the internet for data sharing. Tony also continued fostering education sector interest in the new spatial technology, with a number of high schools in the Cairns area registering interest in more training for their students.

At the 1998 AGM Fungis members identifying the need to spread further south, into the Townsville area. Les Searle had been approached by the Queensland Spatial Information Council (QSIC) and Queensland Spatial Information Directory (QSID) with a request that Fungis get involved in looking at data sharing. Peter Swain had a teleconference with a number of Shire Councils in Queensland to discuss the idea of combining of property descriptions with street addresses.

The end of 1998 saw Fungis refocus by establishing working groups and assigning group leaders. Groups included:

- Fungis web site – Les Searle, Geoff Mills and Tony Dawson
- Promoting Fungis in Townsville – Les Searle and Lisa Rutten
- Fungis as QSI/ QSID Reps in North Queensland – Peter Swain and Peter Wilson
- Fungis GIS/Map Competition – Robert Crossley and Tony Dawson (maps displayed at Cairns Show and JCU open days)
- Fungis Business Plan – Peter Swain and Warwick Sayers
- Mapping Science Institute – Affiliation/membership

### 2002

The Australian Map Circle (now ANZMapS), and Fungis held a joint conference at James Cook University in Cairns on the 14<sup>th</sup> – 17<sup>th</sup> July 2002. During this conference Fungis held a mentoring workshop titled 'Spatial Angels'.

2002 saw the groundwork laid for major projects such as Spatial Angels and the Wetlands fieldwork project.



The Wetland project was hands-on with Fungis Exec members working with the Wetlands Foundation Committee.

It was determined that Fungis could play a role by developing project proposals for the following issues:

- Assessment of overgrazing and woody thickening
- Fine scale vegetation mapping and monitoring
- Mapping of infrastructure
- Fire Management
- Erosion gullies and soils mapping
- Mapping of re-vegetation projects

The Exec. Committee rollcall at his time was:

- Lisa Newton – Chair
- Mark Hopp – Deputy Chair
- Peter Wilson – Treasurer
- Lesley Davis – Secretariat (20 hours per month)
- Committee Members:
- Terry Webb
- Les Searle
- Shane Albertson
- Jan Carr
- Rachel Mills
- Geoff Hunter
- Joe Rhodes

By 2002, Bob Peever and Alan Stafford had been made life members in recognition of their support and willingness to stand up when Fungis needs a spokesperson. Outgoing Exec members Richie Bellero, David Gillieson and Warwick Sayers were formally recognised with certificates for their commitment to Fungis.

Fungis, as usual, had worked hard during 2002 and on 22<sup>nd</sup> November members celebrated with a Christmas party at the Yorkey's Knob Boat Club.



### 2003

By February 2003 the Fungis website was up and running and the newsletter was online and in colour with a new little 'Fungis man' logo image.

Fungis Chair Lisa Newton anticipated yet another successful year of enthusiasm and productive community projects.

The 2003 Annual Conference was hosted by the Herbert Resource Information Centre (HRIC) on 11<sup>th</sup> to 13<sup>th</sup> March. HRIC manager Raymond De Lai produced two days of presentations from the Herbert region along with presentations by groups from across Australia. The third day of the conference included a networking cruise through the Hinchinbrook channel.

During 2003 the new tourist touch screen maps were presented in a workshop at the Atherton Information Centre and discussions about the new QSIIS Survey and Mapping Infrastructure Bill took place. Fungis members turned out in force to show support for, and contribute to, the QSIIS Strategic Directions Workshop held at Cairns City Council.

Ecosystems Management (Aust.) Pty Ltd established a new service in Cairns producing high resolution digital aerial photography and Fungis Exec member Rachel Mills was at the helm of this new technology.

Bob Peever presented a proposal for forming a community-based organisation Atherton Tablelands Geographic Information Systems (ATGIS).

The 2003 AGM saw a new and enthusiastic Exec with Mark Hopp as the new Chair and Exec members as follows:

Reuben Sinclair – Local Government Authority (Mareeba Shire Council)

Colleen Hallmond – Education (TNQ TAFE)

Sharlene Blakeney – State Government (NRM Mareeba)

Members continued with the Wetlands project and the Spatial Angels group was still looking for funding options. During the 2003 Annual Conference the best things were donned for a 'Casual Night of Colour' at the Botanic Gardens.

Fungis threw their support and efforts behind the introduction of Cert. III in Spatial Information Services being held at Atherton TAFE.

During 2003, Mareeba Shire Council donated the services of a GIS officer and DGPS equipment to work with Eacham Historical Society to map and identify the historical Rush Track, used from 1880 to 1917 to transport tin and copper from the Bischoff Mill on the Walsh River, near Watsonville, to Herberton.

In 2003 Lisa Newton, Les Searle, Geoff Hunter and Mark Hopp attended the inaugural conference of the newly formed Spatial Science Institute in Canberra. Lisa presented a paper titled 'A Regional Information Management System in Far North Queensland'.

Given the emergence of the Spatial Science Institute (SSI) group, vigorous debate about Fungis's future took place. Should Fungis amalgamate with SSI or remain a separate identity?

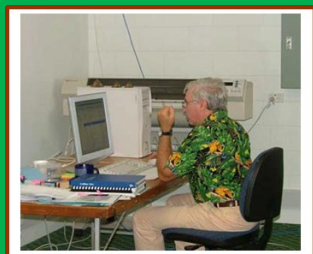
At the 2003 AGM the following resolution was carried:

*Fungis will retain its independence, and the essence that is Fungis. The Executive will continue to communicate with SSIQ on issues such as accreditation and partnership possibilities, and report back to members regularly through the next twelve months. The communication with SSIQ will be assertive, and focused on maintaining Fungis values including accessibility, local focus, fun, inclusion of non-specialists, GIS User Group, and membership costs."*

## 2004

In 2004 Fungis Exec members, notably Joe Rhodes, contributed to the efforts of the organising committee for the establishment of SSI Northern Group.

2004 saw the establishment of Atherton Tablelands Geographic Information System (ATGIS) as a business unit serving the three southern Tablelands shire councils (Atherton, Eacham and Herberton). The new unit was funded by the federal government's Sustainable Regions Program and on January 5<sup>th</sup>



work commenced to set it up in an Atherton Shire Council building.

*Bob Peever hard at work in the new ATGIS Office\_2004*



*Anne Stapledon at the new ATGIS Office\_2004*

In 2003/04 Fungis members Bob Peever and Colleen Hallmond worked tirelessly to establish Certificate 3 in Spatial Information Services at Atherton TAFE.

During 2004, Tropical North Queensland TAFE, Atherton Campus, in partnership with ATGIS (which provided spatial industry trainers) successfully delivered Certificate III and Diploma courses in Spatial Information Services. The content for these courses was developed by Les Searle.

A Spatial Information Services Industry Liaison Group was formed to provide focussed and effective direction to industry training. Membership in this group included TAFE representatives, Fungis members, JCU, ATGIS, Federal, State and Local Government, SSI and non-government representatives.

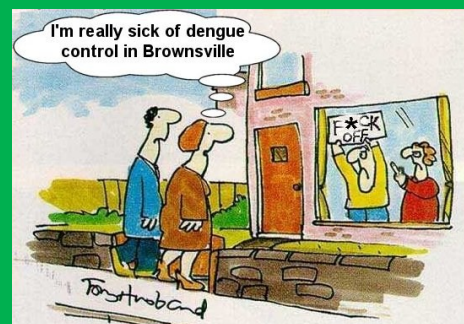
The 2004 AGM saw another new Exec team with Terry Webb as president. This was a year of outstanding achievement and Fungis events included the combined Geomage workshop and 'Art in GIS' day in Atherton, and an introduction to the National Land and Water Resources Audit and NRM Toolkit by Peter Wilson. A workshop to discuss options for the collaborative purchase of imagery for our region was conducted by WebMap.



The 2004 Annual Conference – 'Coast & Culture' – held at the Horizon Resort Panorama Room at Mission Beach was another huge success.

As a result of the 2004 AGM, the following Fungis members served on the Executive:

- Colleen Hammond
- Jocelyn Starmer (Acting for Colleen)
- Alistair Hart
- Mark Hopp
- Geoff Hunter
- Tony Martin
- Lisa Newton
- Bob Peever
- Joe Rhodes
- Les Searle
- Reuben Sinclair
- Meagan Smith
- Alan Stafford
- Terry Webb



Also in 2004 a Memorandum of Understanding was drafted between Fungis and the Mareeba Wetlands, along with a brief outlining how members may get involved in work on the site.

The life of a GIS officer can be adventurous, as illustrated by a story in a 2004 Fungis newsletter in which intrepid Queensland Health GIS officer and Fungis member



Alistair Hart reported on the life as a Dengue Action Response Team member, conducting 'seek and destroy' raids on the dreaded Dengue mosquito *Aedes Aegypti*.

### Alistair in action

This hazardous employment saw Alistair suffer through travel to magnificent venues from Yorke Island to Airlie Beach to track the hazardous beast. Not only were the mosquitos dangerous so were some of the humans Alistair encountered.

Al's experiences included having the dogs and a hose set on him, naked people answering the door and being mistaken for a certain religious group member.

## 2005

In 2005, QSIIS worked on two important projects in Queensland: the co-ordination of spatial imagery in Queensland and the State Digital Road Network (SDRN) projects. 18 Shire Councils throughout Queensland participated in the Rural Addressing Project. This enabled emergency services and community service providers to quickly and accurately find rural addresses.

9<sup>th</sup> & 10<sup>th</sup> April saw Bob Peever (with family helpers) organising a weekend workshop on using a GPS efficiently. This workshop was pitched for beginners and helped to introduce non-tech community members to the spatial industries sector.

The 2005 Annual Conference, "A Dam Smart Conference" at Lake Tinaroo on 17<sup>th</sup> to 19<sup>th</sup> August, was another enormous success for Fungis. Sessions included technical workshops on working with data, understanding mobile mapping and remote sensing, and working together to advance data access.

2005/2006 saw Reuben Sinclair as Chair of Fungis, and Guy Carpenter worked wonders on a new transformation of the Fungis web site.

TC Larry created an incentive for nearly 100 members of the spatial and emergency response communities to meet and explore the value of spatial information in response to a major disaster - how it is applied and how it can be improved. Fungis embraced the challenge and on 18<sup>th</sup> and 19<sup>th</sup> September the 2006 Fungis Annual Conference, "Sandbags and Sandals", took place in a conference room at the Cairns City Council





### Delegates at the 2006 Conference

At the 2006 AGM, Exec. Members sought to clarify Fungis directions via a survey And Directions Forum.

Members prioritised Fungis key objectives as follows:

- Gaining personal skills and knowledge of GIS technologies, data availability and industry developments through workshops, seminars and educational activities.
- Being involved in changes and linkages in your local GIS community that will improve the way GIS is used and taken up by a broader sector through education and facilitation of improvements in the way we work together.
- Enjoying light social and technical networking and activities with members of the local GIS community.
- Influencing state and federal directions in GIS development, data acquisition and availability through belonging to a respected and politically influential GIS organization.
- Forming strong associations, networks and influences with other state and national professional industry bodies.



In 2006 the Exec established Task Groups:

#### Communications:

- Lisa Newton - coordinating other task group roles in managing the new you beaut Fungis website.
- Bob Pettit – Fungis Newsletter, August Edition, and developing interactive news section of new website.
- Jason Allen, - Website
- Alistair Hart,
- Guy Carpenter - Web site

#### Conferences:

- Alistair Hart - Fungis Annual Conference
- Reuben Sinclair - Fungis Annual Conference
- Meagan Smith - AGM
- Geoff Hunter - liaison between Cairns Spatial 2006 (SSI) & Fungis
- Tony Martin

#### Profession Development/Workshops:

- Bob Peever, Anne Stapledon, Lisa Newton

#### Developing Data Access section of new website:

- Caroline Bruce, Liesl Harrold, Reuben Sinclair, Anne Stapledon

#### Rollcall of the 2006/2007 Fungis Executive Committee:

- |                   |                                     |
|-------------------|-------------------------------------|
| • Reuben Sinclair | Chair                               |
| • Alistair Hart   | Deputy Chair                        |
| • Meagan Smith    | Treasurer & Secretariat             |
| • Caroline Bruce  | Communications                      |
| • Bob Peever      | Continuing Professional Development |
| • Geoff Mills     | Data Access                         |
| • Adella Edwards  | SSI Liaison                         |
| • Liesl Harrold   | Exec member                         |
| • Andrew Mitchell | Exec member                         |
| • Narelle Barton  | Exec member                         |
| • Anne Stapledon  | Exec member                         |
| • Rod Neilson     | Exec member                         |
| • James Humphrey  | Exec member                         |

Late in 2006, Fungis published Webpage for Dummies, a document that helps all members submit information/articles to the Fungis website—this is still applicable, so go use it!

#### *To be continued...*

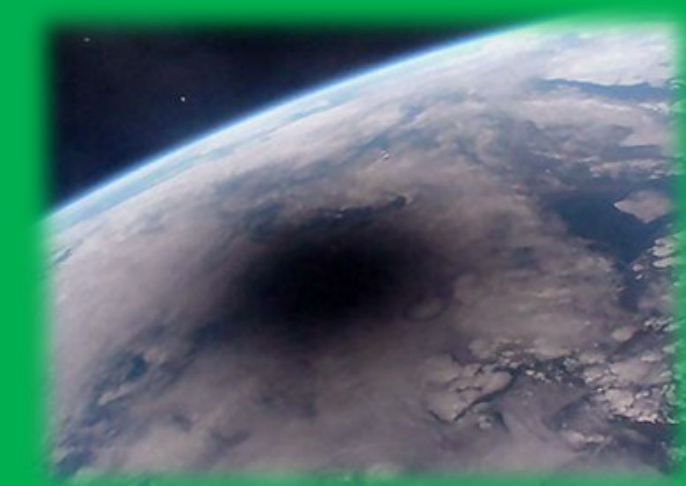
*In preparing this history article, special thanks goes to Anne Stapleton for always offering to provide her professional editing touch, Alistair Hart also for his editing skills and supply of additional photos, and to all of the Fungis members for generously donating their time to recall past events.*

# Cairns Solar Eclipse 2012

**A total solar eclipse can be viewed in Cairns on November 14<sup>th</sup> 2012 starting just after sunrise at 6:39am AEST (gmt+10) with the Sun 14 degrees above the horizon. Totality will last for just over two minutes.**

## What is a Solar Eclipse?

A total solar eclipse is probably the most spectacular astronomical event that most people will experience in their lives. There is a great deal of interest in watching eclipses, and thousands of astronomers (both amateur and professional) travel around the world to observe and photograph them.



## What will you see?

During a total solar eclipse, the moon moves in front of the sun and completely covers it. A shadow is cast on the Earth's surface in a narrow path usually moving from west to east. To experience a total solar eclipse, you have to be in the direct path of the shadow. As the moon moves between the earth and the sun, the shadow on the sun will look like a small bite which gradually increases in size. This could take about an hour. As the eclipse approaches, the temperature can drop, the sky becomes darker and an ominous black shadow approaches from the west.

In the final few seconds before totality, the last parts of the sun's surface shine through the valleys on the moon in a shimmering display called Bailey's Beads. Finally the beads are reduced to a single point and the sun looks like a dazzling diamond ring. As the last bright point disappears, the sun's pink upper surface called the chromosphere can be seen around the edge of the moon and often, pink loops of plasma extending above the chromosphere are visible. During totality, the moon appears as a black hole in the sky surrounded by the pearly white Corona, the sun's outer atmosphere composed of ionised gas which curves out from the sun, usually in a pattern formed by the sun's magnetic field. As the moon moves away from the sun, Bailey's Beads may be seen again before the sun fully emerges. (*Astronomical Association of Queensland*, [www.aaq.org.au](http://www.aaq.org.au))

## How can you view the eclipse safely?

Safety precautions must be taken before and after this phase. Do not look directly at the sun with the naked eye or through an optical device such as binoculars or a telescope as it can cause permanent eye damage.

## Why Cairns will be the best place to view the eclipse and when it will occur?

Two to five solar eclipses occur each year, and no more than two of those can be total eclipses. The 2012 Total Solar Eclipse on November 14, will best be viewed in Cairns, which is on the path of totality of the eclipse. Totality will occur just after sunrise at 6:39am AEST (gmt+10) with the Sun at an altitude of just 14°.

If you are not able to be in beautiful Cairns for the event, the following link will take you to the Cairns City Webcam. This webcam is located on the Marina overlooking Trinity Inlet.

<http://www.cairnsinfo.com/webcam.php>

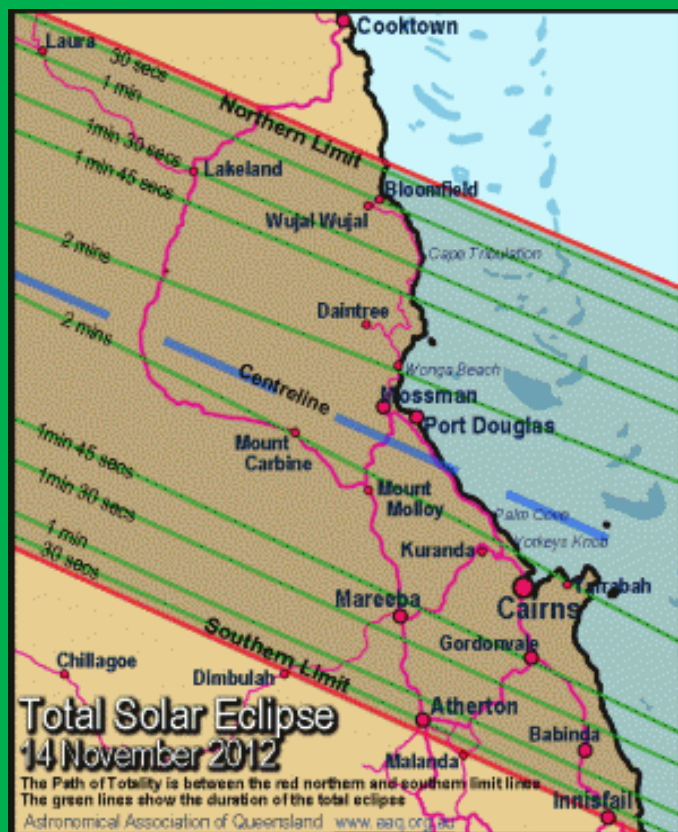
Google and NASA have sites to keep abreast of the event.

[http://xjubier.free.fr/en/site\\_pages/solar\\_eclipses/TSE\\_2012\\_GoogleMapFull.html](http://xjubier.free.fr/en/site_pages/solar_eclipses/TSE_2012_GoogleMapFull.html)  
<http://eclipse.gsfc.nasa.gov/eclipse.html>

Researchers from Queensland University of Technology (QUT) and James Cook University (JCU) will be on hand at TERN's [FNO Rainforest Supersite](#) to observe a rare phenomenon: a false dawn chorus in bird species that, believing the sun is going down, first become quiet and then start calling again as the sun re-emerges.

<http://www.tern.org.au/Newsletter-2012-Oct-ASNBioacousticEclipse-pg24044.html>

The results of the eclipse study will be available in December 2012 from the [Bush.FM](#) website.



*North Queensland Path of solar eclipse  
(Image from [www.aaq.org.au](http://www.aaq.org.au))*

# Fungis Funnies



Q. I'm not a plane, but I can fly through the sky, I'm not a river, but I'm full of water. What am I?

Answer. I'm a cloud

Q. NASA was considering sending canaries into space to study them under zero gravity. The project was scrapped when someone realised that in spite of having sufficient water supplies, they could die of dehydration within a few hours. Why?

Answer: Birds, unlike humans, need gravity to swallow. Humans can swallow even while hanging upside down.

Here on Earth it's almost always true, that tomorrow will follow today. Yet there is a place where yesterday always follows today. Where is this place?

Answer: In a dictionary

I have keys that open no locks, I have space, but there is no room, You can enter, but you can't go in. What am I?

Answer: computer keyboard

Q. If a wheel has 64 spokes, how many spaces are there between the spokes?

Answer: 64. The space that comes after the 64<sup>th</sup> spoke, would be just before the first spoke.



## What free programs should every GIS user have installed?

Here's a list to start with.

[Google Earth](#), for viewing and creating KMZ/KML files

[Google Sketchup](#), for creating 3D models

[PointVue LE](#), for viewing LAS (LiDAR) files in 3D

[PyScripter](#), for Python scripting

[ArcGIS Diagrammer](#), for designing geodatabases and modifying schemas (ESRI XML workspace documents)

[Visual Studio Express](#) (C# or VB.NET), for .NET development

[SharpDevelop](#), alternative IDE to Visual Studio for .NET development -- also handy for converting between VB.NET and C#

[TortoiseSVN](#), [TortoiseCVS](#), [TortoiseGit](#), or [TortoiseHg](#) for version control on Windows

[Oracle SQL Developer](#), for poking around the back end of ArcSDE, running queries, etc.

[PrimoPDF](#), for printing/appending to PDFs

[LightShot](#), for quickly taking and uploading screenshots, or [GreenShot](#) which is similar but quite a bit more powerful/customizable (thanks @Mike Toews for mentioning it in one of the comments).

[VLC media player](#), for desktop video recording and video playback

[MSI Afterburner](#), for 3D video recording

[VirtualDub](#), for basic non-linear video editing

[XnView](#), [GIMP](#), [Paint.NET](#), and [InkScape](#) for various graphics tasks (each has their own strong suits)

[FileZilla](#), for FTP sites

[7-Zip](#), for ZIP/RAR files

[UnxUtils](#) - For a lightweight (native Win32) port of common GNU utilities like "tail" and "grep". Tail is great for displaying log files in realtime, while grep is a powerful (regular expressions-based) text search tool.

QGIS/QMAP – [www.qgis.org](http://www.qgis.org)

GDAL – command prompt based GIS Analysis

Do you feel anything else should be included? Please contribute to the source site

<http://gis.stackexchange.com/questions/12105/what-free-programs-should-every-gis-user-have-installed/12112#12112>

OpenSource GIS

IT'S FREE



# Upcoming Events

16th November 2012

Watch This Space  
For Updates

June 6th & 7th 2013

25 Years of Fungis

Annual Conference

*Ground to Cloud:*

*Maintaining the edge  
in spatial imagination*

Incorporating AGM

Learn 'What's Hot'

LiDAR 2013

Shaping up to be

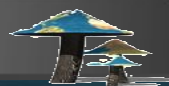
*fantastic*

Connect with us ... (these are in beta and we need your help to keep them updated)

[Facebook](#) / [Twitter](#) / [LinkedIn](#) / [StumbleUpon](#) / [Delicious](#) / [Google+](#) / [MySpace](#) are using fungis1990. This was the year we were incorporated and people are using "fungis" for some pretty weird sites :-)

## FUNGIS

Far North Queensland GIS Group Inc.



### Smartphone and Spatial Applications Workshop

Workshop Topics Include:

- Storing Spatial Data Offline on Smartphones
- Case Study- Development of Location Aware Apps
- Apps for GIS in the Wilderness
- Augmented Reality –what is it and why is it awesome?
- Using GPS to learn about tourist behaviour



9.30am-4pm, Friday

16th Nov 2012

@ Pacific Hotel Cairns

Registration:

\$140 FUNGIS & SSSI members,  
\$170 non-members

Avg. Speed = 9.5 km/h 2.6 m/s



Distance : 15.0 (m)  
AA, U.S. Navy, NGA, GEBCO  
Whereis® Sensis Pty Ltd  
© 2010

Don't Be Left In the  
Dark...



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

Email  
[workshops@fungis.org](mailto:workshops@fungis.org)