

Reviving an old and valuable collection of microscope slides of physical samples through the use of Citizen Science

Presenters:

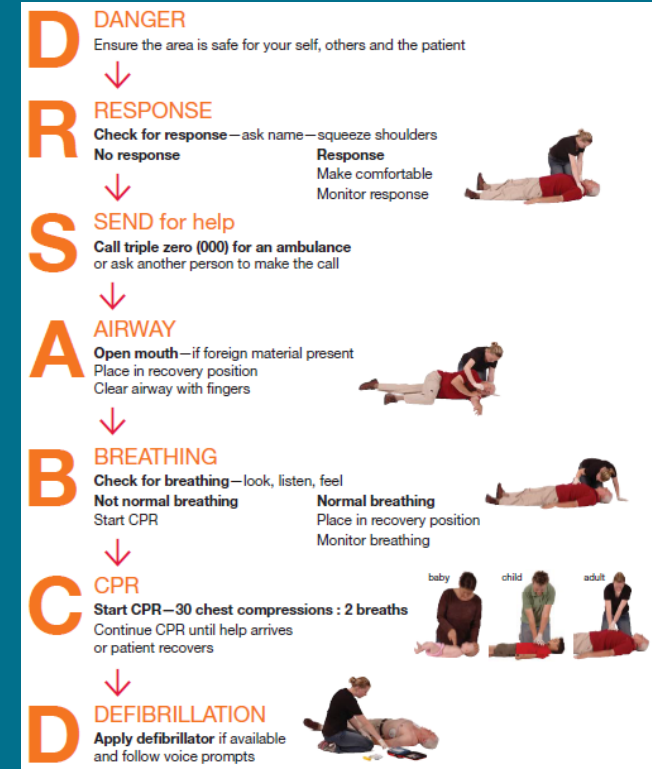
John Pring (Geoscience Australia)

Lesley Wyborn (Australian National University)

Neal Evans (Geoscience Australia)

Agenda

- What we do
- What is a thin section microscope slide
- The issues surrounding the rescue
- The solution
- The results
- What drives a Volunteer
- Where to

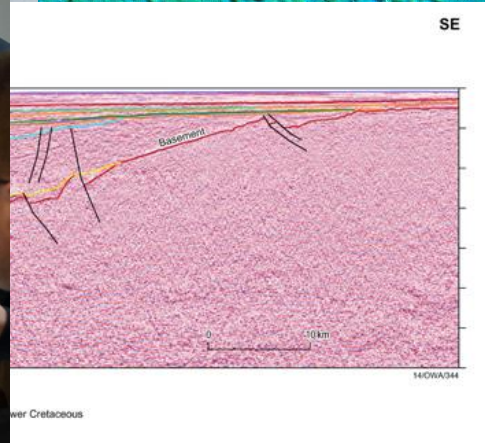
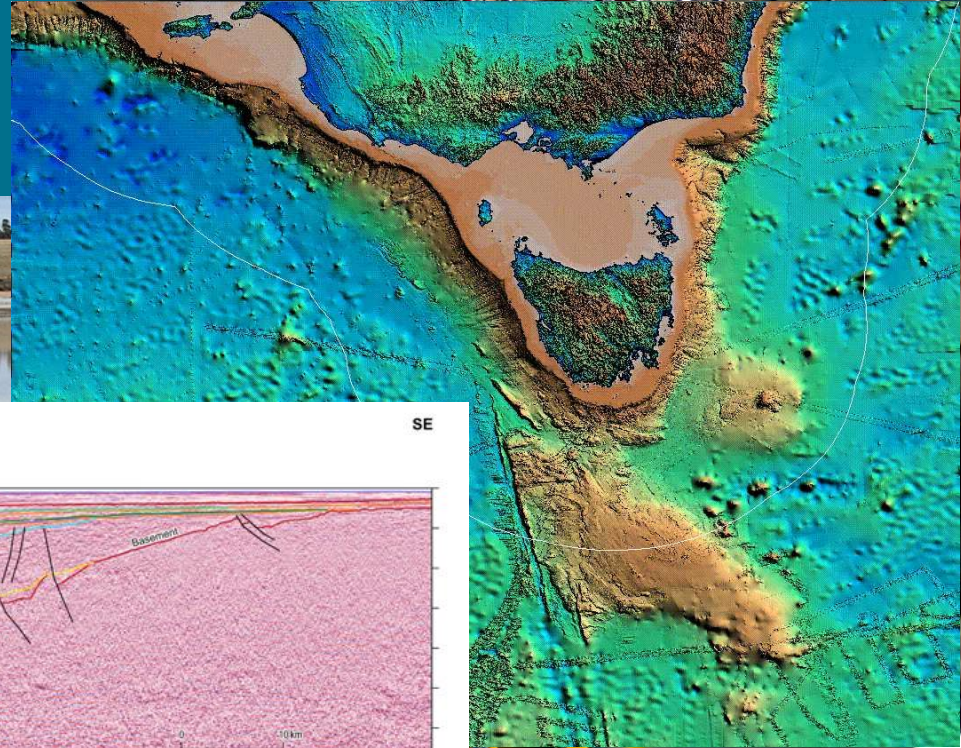
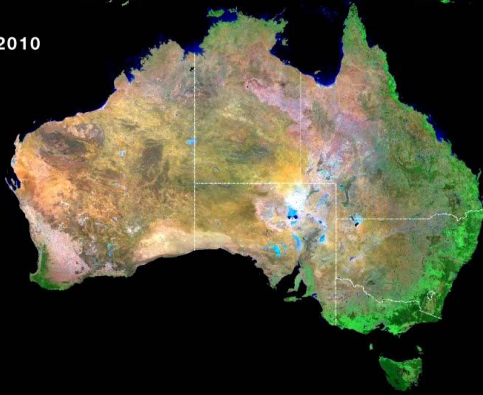


Courtesy of St John - <https://www.stjohnswa.com.au/drsabcd-action-plan/>

What we do

Age (Ma)	Period	Epoch	Stage	Stratigraphy South Pacific	Group	Supersequence	Seismic Analogues	Basin Phases	Depositional Environments	Regional Events	Source	Reservoir	Seal
0-2	Quaternary	Quaternary	Quaternary	Unconsolidated Late Cenozoic									
2-5	Neogene	Neogene	Tortonian			Moradia 12							
5-10	Neogene	Neogene	Sarmatian										
10-15	Neogene	Neogene	Sarmatian										
15-20	Neogene	Neogene	Sarmatian										
20-25	Neogene	Neogene	Sarmatian										
25-30	Neogene	Neogene	Sarmatian										
30-35	Oligocene	Oligocene	Chetani										
35-40	Oligocene	Oligocene	Pugan										

09 Nov 2010

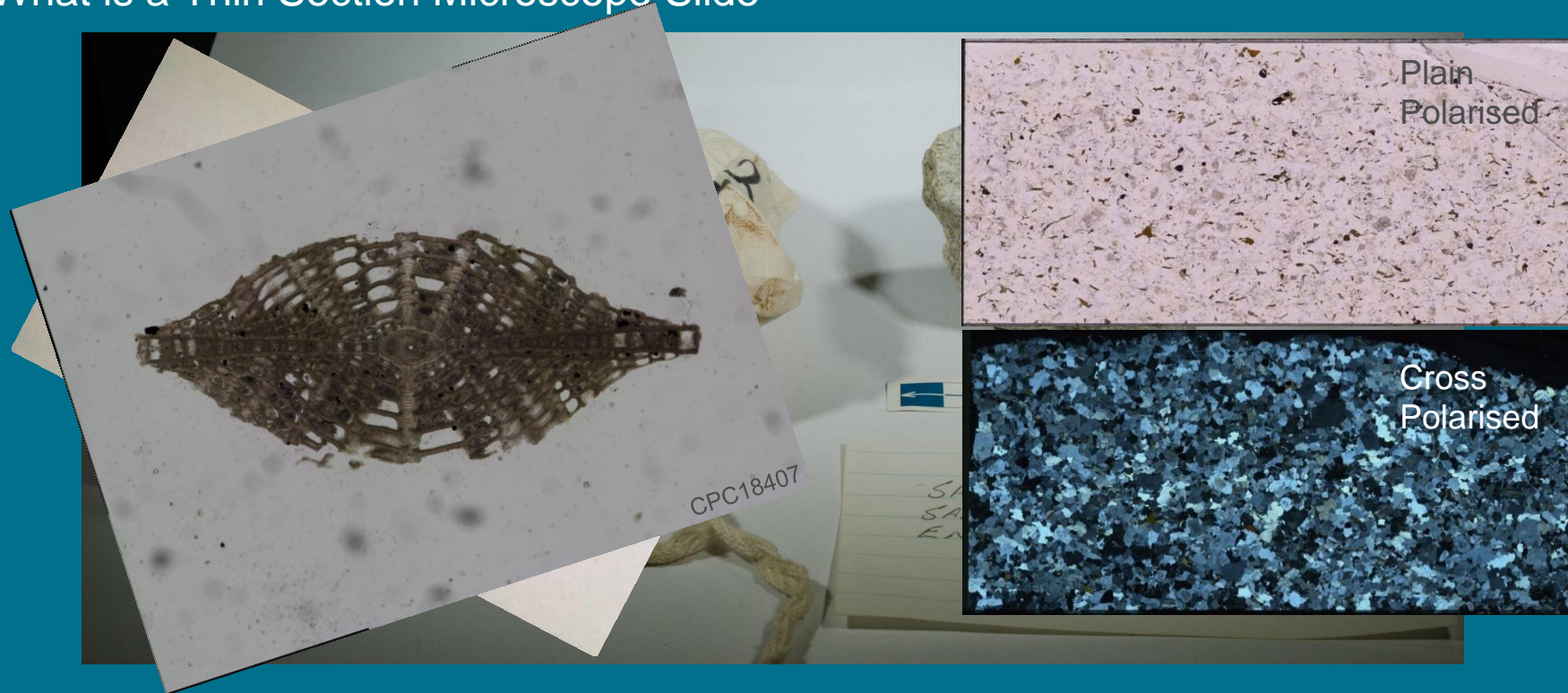


Lower Cretaceous



Getting Started

What is a Thin Section Microscope Slide



5						387. 5
Reg. No.	Locality	Age	Description	Sender	Date	

Bureau of Mineral Resources. Sample Submission Form

Reg'd No.	F. Type Zone	East ^s or Lat.	North ^s or Long.	Field book ref.	Air photo ref.	Hr	Day	Mth
112-3612	4339	11	34	340	7817	8	8	8

CARRARA RANGE FM.

H.S. Porphyritic intermediate trachyte

Texture: modified granitic l.g.d. 2 mm

TS 9069

The rock is a devitrified rhyolite. The matrix is composed of reddened crystals (presumably feldspar) that have crystallized during devitrification and are enclosed in quartz. Larger aggregates of intergrown quartz and feldspar (most likely potassic feldspar) occur scattered through the rock and have a sug-like nature. Some small aggregates of mica are present. Clast-like phenocrysts of altered feldspar occur.


Quartz fills several small fractures.

Quartz fills several small fractures.
The rock is similar to the Gawler Range Porphyry
of South Australia.

JUN 1961

Deso. W.R. McCarthy 29/3/62

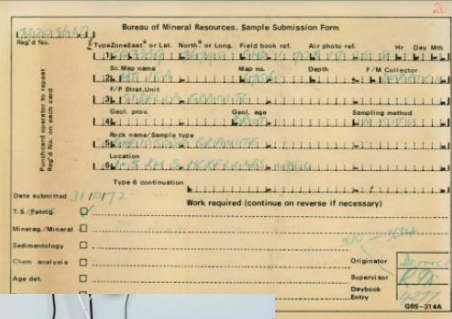
The Solution



Geoscience Australia - Specimen Card Catalogue 3 72203610.jpg

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NAME: GRANITE

Texture: medium-grained, light brown

Quartz (5%) : large & small, highly stained, embedded in a matrix of fine-grained, light brown

Plagioclase (25%) : is highly stained, embedded in a matrix of fine-grained, light brown


K-feldspar (20%) : is granular, embedded in a matrix of fine-grained, light brown


Biotite (10%) : is deep brown, embedded in a matrix of fine-grained, light brown

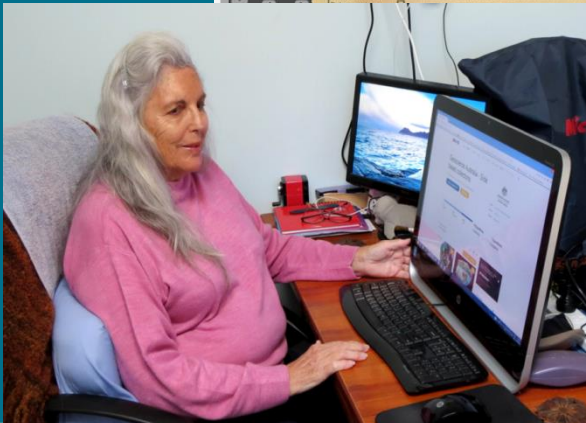
Hornblende (5%) : is associated with feldspar, embedded in a matrix of fine-grained, light brown

Spinel (2%) : forms granular, embedded in a matrix of fine-grained, light brown

Accessories : apatite, zircon, fluorite.







Geoscience Australia - Specimen Card Catalogue 3 Catalog Number:

[Go to a previous task](#)

Country	Australia
Reg'd No. (Fm)	
State/Territory	Queensland
Coordinate Zone	54
Air photo Ref.	K 17 28
F/M Collector	Derrick
Map No.	6756
Formation (Strat. Unit)	Sybella Granite
Geol. age	Proterozoic
Rock Name/Sample Type	Gneissose Granite
Date submitted	(from) 31 10 1972 (to) DD MM Year

Images

Identify and tag images of animals and collection objects to support information discovery and research.

[See all camera traps](#)

Overall Results

Transcribed records	≈40,000
Catalogued Slides	59,000+
Electronically searchable	27700+
Indicative time expended by Volunteers	1144 hours
No. of Volunteers involved	36 (64% by 3 transcribers)

Spatial Component

- Determining the location
 - Estimates
 - Aerial Photographs
- Projections and Datum
- Display the location



What drives a volunteer?

- Like doing the work and gaining more knowledge
- Keeping mentally active
- Sense of Satisfaction
- “Discovering” new places
- Friendly rivalry
- Personal statistics and virtual prizes
- Sense of community

Where to

Current distribution

OGC Web services

Possible

Home Data Research Services Contacts Discovering geology News and events Hosted sites

British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

Gateway to the Earth

Home > Our data > OpenGeoscience > BGS rock collections > Search form > Search results > Collection record

Our data

OpenGeoscience

- View maps
- Apps
- Map data downloads
- Photos and images
- Index
- Borehole core sample photographs
- GeoScenic
- Petrological thin section images
- Publications
- Scanned records
- Data collections
- Software
- Web services

BGS mineralogy and petrology collection record

Sample number	S79530; COLLNOWX1042;
Sample Donor	Stephenson, D.
Rock name	Gneiss; Schist; 'Original entry: Mica Schist'
Stratigraphy	Not entered
Comments	Mica schist/gneiss with pink feldspar porphyroblasts, L.Dalradian
Locality details	Burn of Aultmore, 350m SE of Allacardoch
50k map sheet	Huntly (86W) View images in GeoScenic related to 'Huntly' View a geological map near 'Huntly'
Map reference	NJ 4590 5334
Year collected	1987
Bore name	Not applicable
Confidentiality	No restrictions

Petrological thin sections

Links to high resolution images

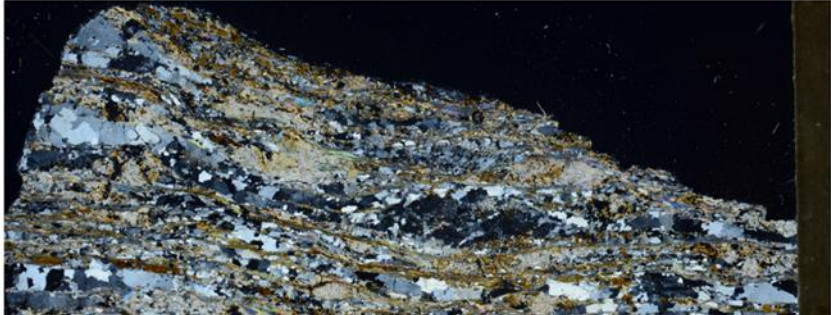
S79530

Cross Polarized, S79530

Plane Polarized, S79530

Transition from XPL to PPL light

XPL PPL



As an aside



5			387. 5		
Reg. No.	Locality	Age	Sender	Date	
2633 R 225 X	Moonie Mine, Tasmania	? Devonian	Gra	W. G. Woolnough	
2632 R 226 X	Hercules Mine, Rosebery, Tasmania	Lower Palaeozoic	Sch		
2633 R 227 X	Flowery Gully, Tasmania	Carboniferous	Cal		
2632 R 228 X	Little Cyster Cove, D'Entrecasteaux Ab. Is.	Tertiary	Intrus		
2 R 229 X	South of Buckland, Tasmania	Mesozoic	Bas		
2632 R 230 X	North, close to turn off from Main Rd. Tas	Lower Palaeozoic	Mica	"	
2632 R 231 X	Fossil bluff, Wynyard, Tasmania	Mesozoic	Shel		
2633 R 232 X	Revelton, Tasmania	Ordovician	Limestone -		
4178 R 233	Moonie Mine, Tasmania	Bas Tertiary	Basalt		
2633 R 234 X	South of St. Helens, "	? Devonian	Granite - Diorite		
2632 R 235 X	Mt. Lyell Tunnel, "	Lower Palaeozoic	Schist		
2632 R 236 X	Patrick River at 46.1	Carboniferous	Quartzite		
2632 R 237 X	North of Swansea, Tasmania	Mesozoic	Dolomite		
4178 R 238	Ringarooma, "	Tertiary	Vesicular Basalt		
2632 R 239 X	Hercules Mine, Rosebery, Tasmania	Lower Palaeozoic	Schist		
2633 R 240 X	"	"	Fine Grained Gne, Lead Silver Ore.		
2632 R 241 X	"	? Devonian	Porphyry		
4178 R 242	Brissie, Tasmania	Tertiary	Basalt		
2633 R 243 X	Ringarooma	Tertiary	Basalt		
2637 R 244	"	"	"		

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Irina Bastrakova

Daniel Jaksa

Digivol Volunteers



Australian Government
Geoscience Australia



Questions?

Phone: +61 2 6249 9108

Web: www.ga.gov.au

Email: john.pring@ga.gov.au

Address: Cnr Jerrabomberra Avenue and Hindmarsh Drive, Symonston ACT 2609

Postal Address: GPO Box 378, Canberra ACT 2601