

# THE CMLC NEWS

## The Canterbury Mineral & Lapidary Club Inc. Newsletter for March 2018



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**Meeting Venue & Clubrooms:** 110 Waltham Road,  
Waltham, Christchurch 7:30 pm on the second Thurs-  
day of the month [Feb. to Nov.]

General Meeting: ..... 8 March, 12 April, 10 May  
Committee Meeting: ..... 8 March, 12 April, 10 May (6.00 p.m.).  
Micro Mineral Meeting: ..... 1 March, 5 April, 3 May

Please remember to sign into the meeting attendance book at the door and pay the \$2 door entry. If you are like me, I put in \$20 which covers me for the whole year. Our new host on the door is Errol Hitt.

**The March Meeting:** This may well be a social evening. So, please bring along a rock or rocks you are knowledgeable about, and be prepared to give a talk about it.

**Supper Duty:** Scott Hardwick, Gerald Birdling, Glen and Val McLennan, Ryan Brooks, P and L Harris.

**Auction:** This will be material from Brian Jones

**Field Trip: 10/11 March:** This will either be to Whitecliffs or High Peak. Details at the club meeting.

## February Monthly Competition Results:

Lapidary:	NZ Agate slice polished both sides	1st J Taylor 2nd M Luxton 3rd R Hall 4th C Tait
Fossil	Marine fossil from Otago	1st J Taylor 2nd D Macdonald 3rd M Luxton
Mineral:	Any NZ multicoloured mineral	1st D Macdonald 2nd C Tait 3rd M Luxton 4th Equal L Day. Lesley B
Alphabet Cup:	mno	1st R Hall 2nd M Luxton 3rd C Mcgregor 4th Equal L Day. Lesley B 5th C Tait
Recent Find:		1st W Stewart 2nd R Lindsay

## March Monthly Competition

Lapidary:

Polished Agate from Woolshed Creek

Fossil

Any fossil from Marlborough

Mineral:

NZ Stilbite

Alphabet Cup:

A specimen from a country, or state starting with s, t, or u

Recent Find:

A specimen collected from the club field trip last month at Okains

Bay.

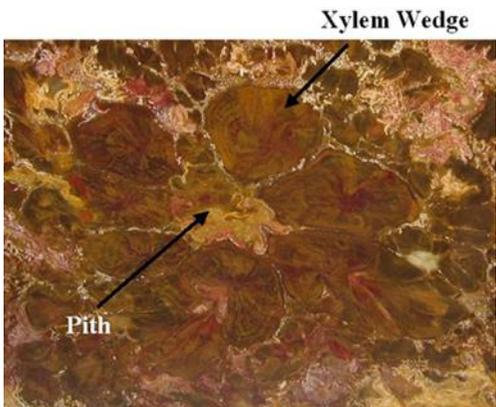
**Grits and Tin Oxide:** Please contact Robin Hall or Malcolm Luxton. Prices have not been advertised as there will be increases with our recent purchase of grade 80 grit and tin oxide.

### Donponoxylon

Now that we have a very good collection of Donponoxylon in our showcase, here is a brief article that should help you understand what it is.

Donponoxylon is a new genus of seed fern described from permineralized axes collected from Middle to Late Jurassic deposits of New Zealand and Australia.

Until recently these fossils were referred to as Pentoxylon or Pentoxylon-like seed ferns.



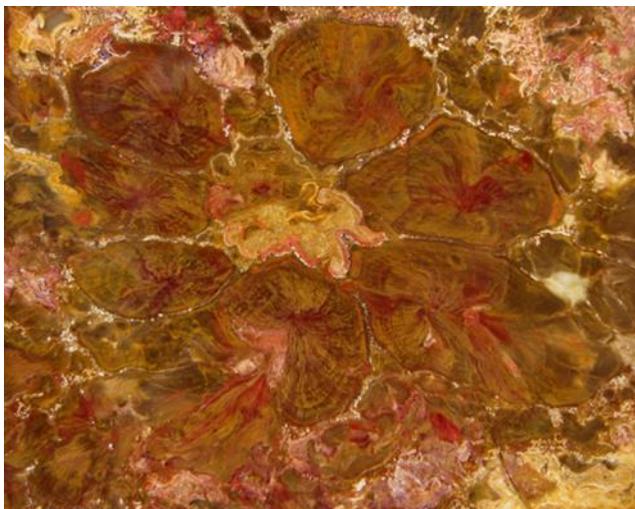
In cross-section Donponoxylon is characterized by individual segments surrounding a pith. The segments exhibit secondary growth that is primarily centrifugal (towards the outside). The segments are oval, pear or wedge-shaped. In cross-section these segments appear to be separate but actually form a complex network as they branch and reconnect along the length of the trunk.



Two species are recognized *D. bennettii* and *D. jacksonii*. The segments in *D. bennettii* are arranged irregularly. *D. bennettii* exhibits secondary concentric, wave-like vascular rings that surround the central segments and pith. *D. jacksonii* has central segments arranged regularly, a large

pith, and lacks the peripheral secondary vascular wave-like rings. Donponoxylon lived in moist volcanoclastic soils along the south-east coast of east Gondwana (Tidwell, Britt, and Wright, 2013, p. 36)

Seed Fern  
Donponoxylon ben-  
nettii  
Queensland, Australia  
20.5 cm x 15 cm



#### Bibliography

Tidwell, W.D., Britt, B.B. & Wright, W. (2013). Donponoxylon gen. nov., a new spermatophyte axis from the Middle to Late Jurassic of Australia and New Zealand. Review of Palaeobotany and Palynology. 196, pp. 36-50.

The best examples of Australian Donponoxylon I have seen is in the pioneer museum at Miles, which is west of Chinchilla, Queensland. This is part of the Norman Donpon rock and minerals collection. This Pentoxylon has now been named after him. If you do not want to travel that far, I have a very good collection at my home, and would be happy to have club members come and view. - Editor.

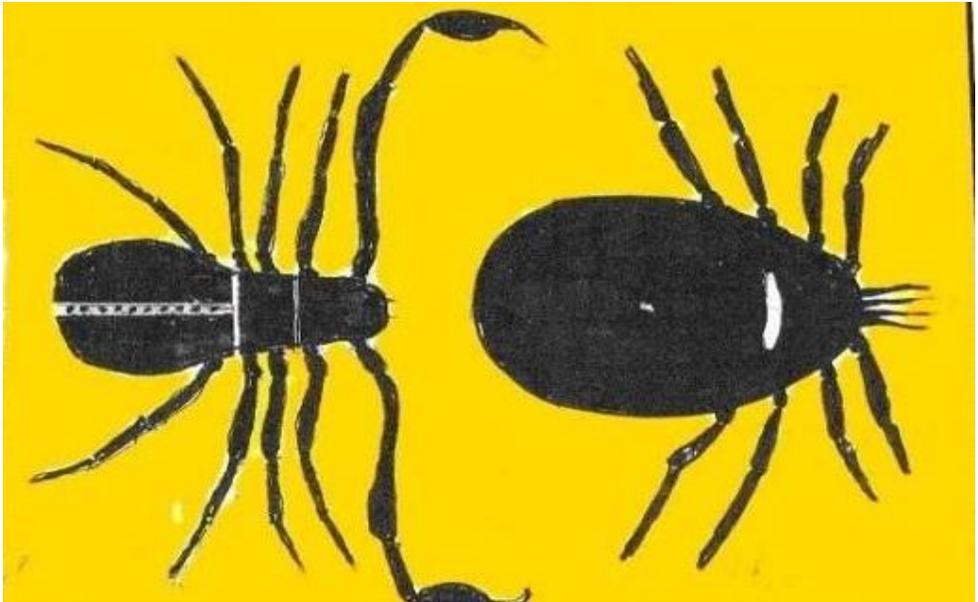
#### **Amber gives a glimpse of Gondwana's forest bugs**

**BOB BROCKIE. Stuff, February 19 2018**

Egyptians, Greeks and Romans have long cut, carved, and polished amber to make fine jewellery, necklaces, beads, and decorative objects such as, rings, dice, sculptured portraits, and magical amulets to ward off evil spirits and diseases.

European amber originated from the coasts of Poland and Russia, where the Baltic Sea drowned a pine forest 44 million years ago. It is calculated that 100,000 tonnes of amber is still buried under the Baltic Sea, and is often washed up on beaches after storms. Today, over 400 tonnes of Bal-

tic amber are extracted and traded every year. Rarely, insects, lizards, fur, and feathers are embalmed in the amber, giving us a picture of animal life



Fossil mite and pseudoscorpion from 20 million year old kauri amber.



Fossilised Baltic amber with insect inside

in an ancient forest.

Amber is also mined in Burma, where 42 insect species have been identified from the 99-million-year-old deposits. In Mexico, 22 kinds of insects have been found in 25-million-year-old amber, and 43 insects, scorpions, worms, and crustaceans found in Dominican Republic amber, giving biologists a detailed reconstruction of a long-vanished forest insect community.

New Zealand kauri gum goes under three names. The stuff oozing out of the trees, or recently buried in the ground, is known as kauri gum. Sub-fossil gum is known as "copal", and kauri gum over a million years old is known as "amber". The ancient amber is produced by ancestors of present



A bug captured for all time in a blob of kauri gum, at Gumdiggers Park in Northland.

-day kauri, and is found in old lake sediments, or as tiny droplets scattered through coal seams in the South Island.

Over the last year or two, Kiwi scientists Daphne Lee and Uwe Kaulfuss (University of Otago), Dallas Mildenhall (Geological and Nuclear Science) and 23 other foreign specialists have sliced and polished thousands of tiny fragments of fossil amber from Nelson, Westland, Otago and Southland. The fragments were then examined under light and scanning electron microscopes.

Preserved pollen grains reveal the nature of the forest, half of whose spe-

cies are now extinct. The team found an extraordinary range of 15 to 25-million-year-old beetles, ants, flies, springtails, mites, pseudoscorpions, cicadas, plant hoppers, midges, sandflies, bark lice, roundworms, spores, fungi, and the wing scales of moths or butterflies, trapped in the kauri amber – even spiders with insects trapped in their webs. The blood-sucking sandflies presumably fed on penguins and seals. All specimens have been deposited in the University of Otago's geological museum.



My own piece of amber with insects. Bought on my travels at San Cristobal da Chapas, South Mexico. - editor.

The findings are extremely interesting as New Zealand is the only place in world with a continuous record of amber going back 70 million years. The amber gives us the only insight into the ecology, food webs and evolutionary history of a community of soft-bodied, fragile animals in a Gondwana forest.

# HETTIE'S ROCK & CRYSTAL SHOP

**Birdwood Ave, Beckenham, Christchurch.**

**Also: Akaroa and Queenstown**

Open 7 days 10 a.m. to 5 p.m.



# GEMSTONE & FOSSIL MUSEUM

67 HILLVIEW ROAD,  
BIRDLINGS FLAT

Owners: Vince & Colleen Burke

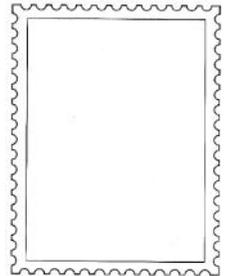
Phone: (03) 329 0812

Email: [gemstonemuseum@gmail.com](mailto:gemstonemuseum@gmail.com)

Web: <http://gemstoneandfossilmuseum.co.nz/>

Open 9:30am till 5:00pm (seven days a week)

Sender CMLC 14 Reynolds Ave Bishopdale, Christchurch 8053



«Field1»

«Field2»

«Field3»

«Field4»

«Field5»