

THANK YOU TO SMEDG FOR SUPPORTING THE NRG

Chaffey Dam's Red Ribbon Radiolarian Chert and Doonba Dunite now at NRG



The Steering Committee of the National Rock Garden wishes to express its sincere thanks to the Sydney Minerals Exploration Discussion Group (SMEDG) for the two donations in recent years enabling the transportation, delivery, plaque manufacture and face polishing for specimens selected by Dr Paul Ashley from Water NSW's Chaffey Dam site SW of Tamworth and Peter English's quarry located between Barraba and Bingara.

There is another specimen of each rock on a farm at Marulan, set aside for face polishing by a stonemason resident in Colo Vale, which will be added to the NRG display in due course.

We have prepared draft plaque descriptions for each specimen as shown on the attached page. These follow the standard template adopted for use on all plaques at the NRG. The location dot on the upper right will be finalised for the final plaque manufacture. The words "ribbon radiolarian chert" will be corrected to start with a capital letter as for other plaques.

Please examine the acknowledgement of SMEDG in the lower right. Again, these follow the standard lettering specifications for NRG plaques.

I would like to request a 3-4 minute time slot at the commencement of the May SMEDG presentation by John Greenfield at Club York to show images of the unloading and placement of the two SMEDG sponsored rocks, acknowledging the SMEDG support.

Best regards, Mike Smith Director, National Rock Garden, 9 May 2026

Template

Red ribbon radiolarian chert

AGE: Ordovician, 450 million years

LOCATION: Gamilaroi and Anaiwan Country, Chaffey Dam, NSW



SIGNIFICANCE: Silica, the primary mineral comprising this exceptional rock, was sourced from the skeletal remains of minute single-celled organisms that lived in the ocean, known as radiolarians. Red and black colours within the rock reflect the precipitation of iron and manganese from the sea water. The chert's durability has made it highly suitable for the construction of Chaffey Dam.

FORMATION: Originally deposited as soft, flat-lying sediment on the deep ocean floor far from the Australian Continent. Since the Ordovician, over 450 million years ago, these formations were compacted and contorted and now form an elevated outcrop of highly durable rock.



Learn more

Donated by WaterNSW. Transportation and display costs funded by the Sydney Minerals Exploration Discussion Group (SMEDG)

NEW SOUTH WALES Doonba Dunite

Draft 7/4/2026

AGE: Cambro-Ordovician or Permian

LOCATION: Kamilaroi Country, Doonba Station, east of B95 highway between Barraba and Bingara NSW.



Revise
dot
place

SIGNIFICANCE: A dunite is an ultramafic igneous rock dominated by essential olivine (>90% volume). It is a massive grey-green, dense rock - specific gravity ~3.1 g/cm³. It represents an extreme end member of the chemical composition of rock materials. It has useful industrial and agricultural applications due to its high magnesium content.

FORMATION: The dunite formed by crystal settling from magma in a layered intrusion, and is part of the Great Serpentinite Belt, a major geological structure in eastern Australia.



Learn more

Donated by Peter English and Ian Cabot. Transportation and display costs were funded by the Sydney Minerals Exploration Discussion Group (SMEDG)