

## 1983/57. Definition of the Eddystone Batholith

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## Abstract

A new regional name, the Eddystone Batholith, is proposed for the granitic rocks in far north-eastern Tasmania previously included in the Blue Tier Batholith.

## INTRODUCTION

The purpose of this report is to introduce a new regional name, the Eddystone Batholith, for the granitic rocks of far north-eastern Tasmania (fig. 1). The rocks have previously been included in the Blue Tier Batholith. Introduction of a new name will focus attention on the physical separateness of the rocks from those within the Blue Tier Batholith and on compositional differences between the volumetrically dominant biotite granite/adamellites in the two batholiths.

## DISCUSSION

Parts of the Eddystone Batholith appear on the Boobyalla, Eddystone and Blue Tier 1:50 000 map sheets. The overall distribution is shown in Figure 1. The batholith is separated from the Blue Tier Batholith by a substantial tract of Mathinna Beds except in part of Blue Tier Quadrangle where the boundary between the two batholiths is a major fault.

Carey (1953) included the Eddystone Batholith in his Furneaux Anticlinorium which he regarded as a regional granitoid structural unit distinct from what is now called the Blue Tier Batholith. Carey's terminology has not been followed by subsequent workers and McDougall and Leggo (1965) included the granitoids of the Eddystone Batholith in their Blue Tier Batholith. Gee and Groves (1971) and Groves (1977) adopted the same practice.

Groves subdivided the granitoids of the Eddystone Batholith into lesser units, namely, the Boobyalla, Rushy Lagoon, Musselroe and Ansons Bay plutons and the Mt William Sheet. Of Groves' units only the Mt William Sheet forms an entity on the 1:50 000 maps. The other units occur in regions of biotite-garnet-minor muscovite granite/adamellite within which no contacts that could be interpreted as pluton margins have been established. Variations occur in both grain size and texture but individual variants are impersistent. The widespread occurrence of garnet (and cordierite) as an accessory phase distinguishes the biotite granite/adamellite of the Eddystone Batholith from the biotite granite/adamellite of the Blue Tier Batholith.

Kitto (1982) introduced the term Ansons Bay Batholith for granitoids between Musselroe Bay and Eddystone Point. He also included an area of granodiorite (Gardens Pluton) that is part of the Blue Tier Batholith. Given such confusion and the probability of further confusion with the pluton nomenclature of Groves (see above) we prefer to introduce another name for the batholith rather than to attempt a redefinition of Kitto's term.

Age relationships of the Eddystone and Blue Tier Batholiths may

overlap. At Boobyalla a dyke, continuous with garnetiferous granite/adamellite in the Eddystone Batholith transects the Mathinna Beds screen and intrudes all granitoid types in the northern part of the Blue Tier Batholith. However, Cocker (1982) obtained a Rb/Sr biotite age from George Rocks (fig. 1) of 375 Ma which is older than biotite ages from the largest biotite granite/adamellite body (Poimena Pluton) in the Blue Tier Batholith (368, 373, 373 Ma).

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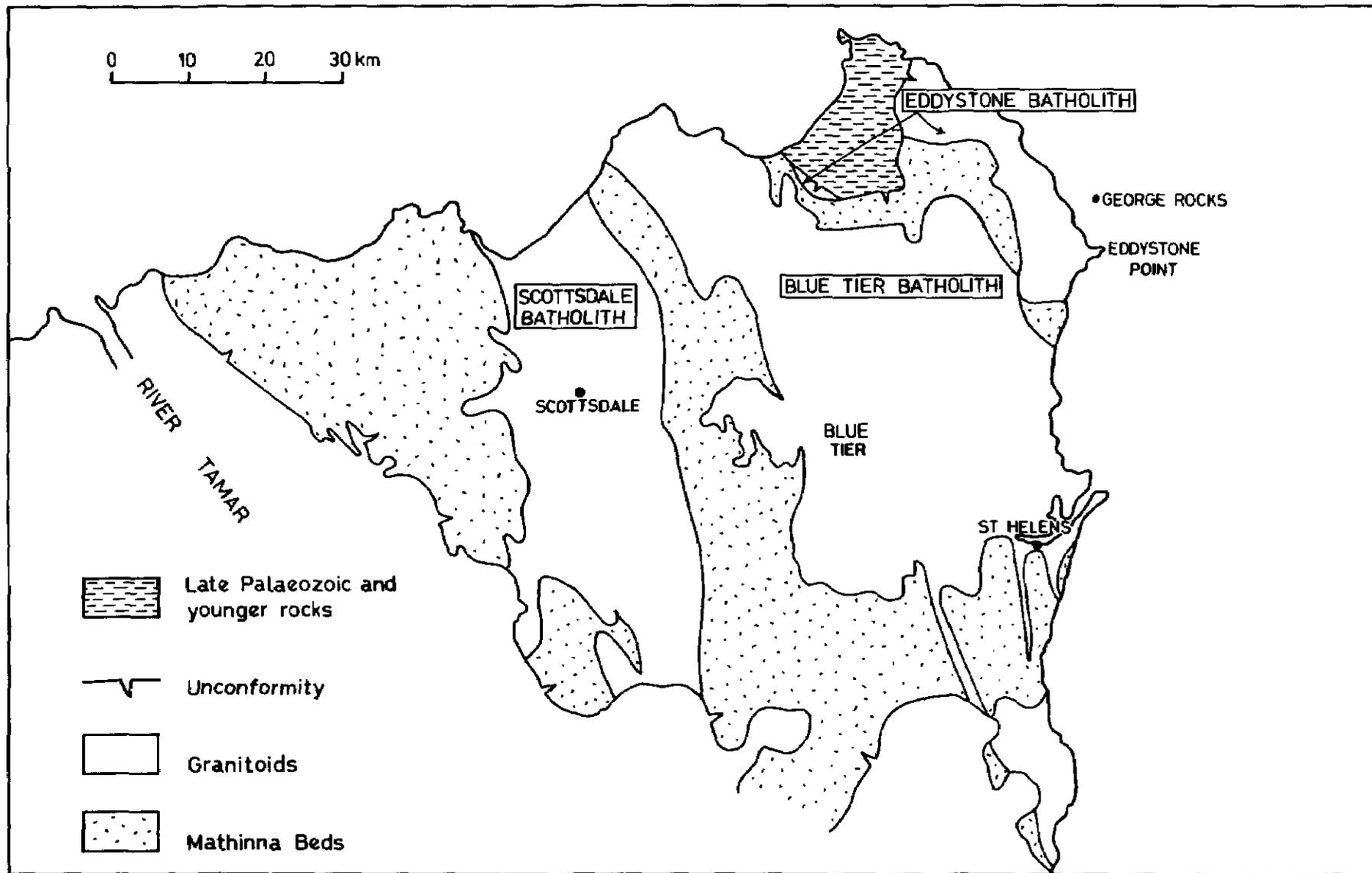


Figure 1.

5 cm