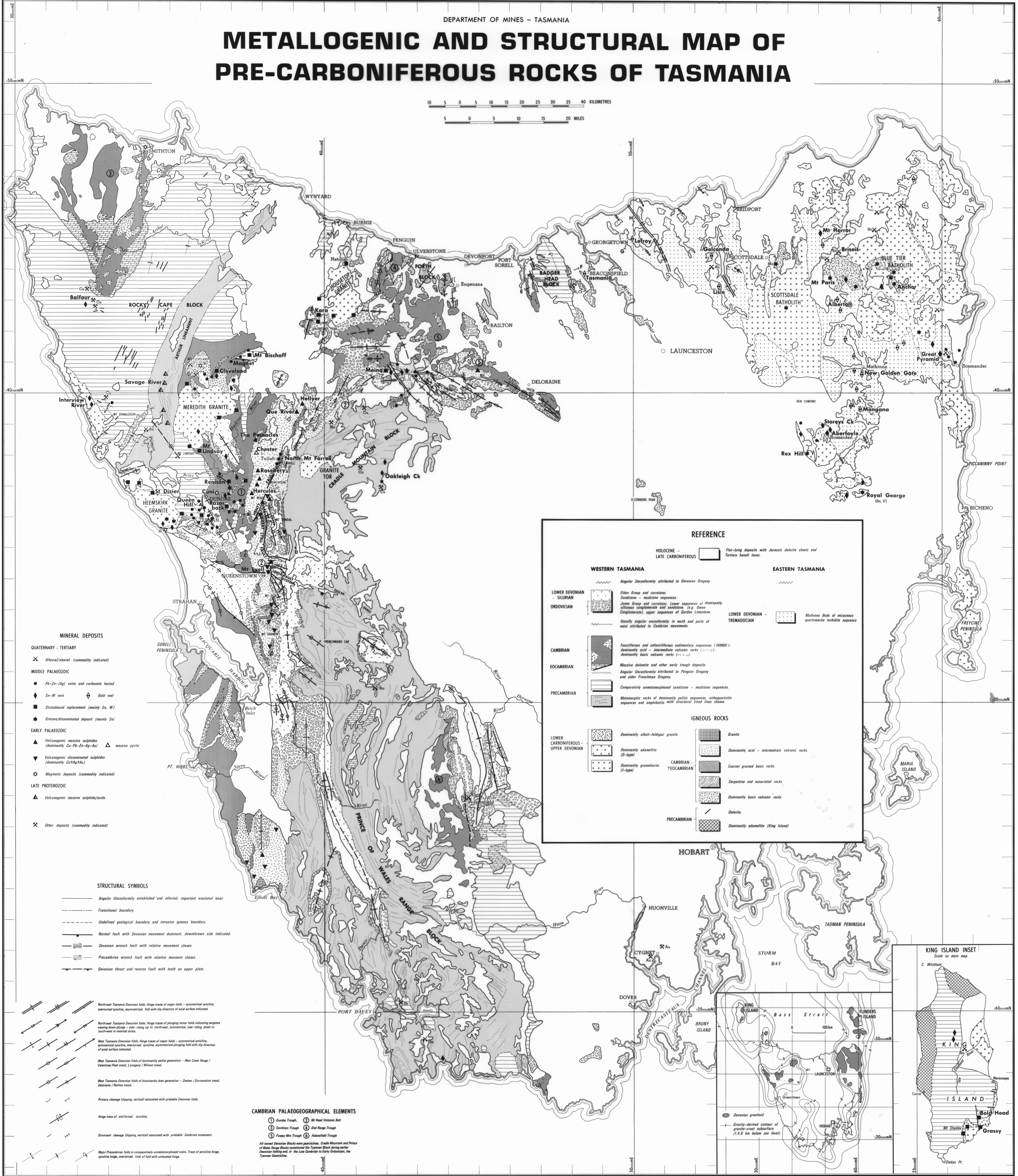


DEPARTMENT OF MINES - TASMANIA

# METALLOGENIC AND STRUCTURAL MAP OF PRE-CARBONIFEROUS ROCKS OF TASMANIA

5 cm

10 5 0 5 10 15 20 25 30 35 40 KILOMETRES  
5 0 5 10 15 20 MILES



- MINERAL DEPOSITS**
- QUATERNARY - TERTIARY
- ✕ Alluvial/fluviol (commodity indicated)
- MIDDLE PALAEOZOIC
- ◆ Pb-Zn-(Ag) veins and carbonate hosted
  - ♦ Sn-W vein
  - ⊕ Gold reef
  - Stratobound replacement (mainly Sn, W)
  - ★ Greisen/dissiminated deposit (mainly Sn)
- EARLY PALAEOZOIC
- ▲ Volcanogenic massive sulphides (dominantly Cu-Pb-Zn-Ag-Au)
  - ▲ massive pyrite
  - ▼ Volcanogenic disseminated sulphides (dominantly Cu-Pb-Ag-Au)
  - ☆ Magmatic deposits (commodity indicated)
- LATE PROTEROZOIC
- ▲ Volcanogenic massive sulphide/basite
- Other deposits (commodity indicated)

- STRUCTURAL SYMBOLS**
- Angular unconformity established and inferred, important erosional level.
  - Transitional boundary.
  - Undefined geological boundary and intrusive igneous boundary.
  - Normal fault with Devonian movement dominant, downthrown side indicated.
  - Devonian wrench fault with relative movement shown.
  - Precambrian wrench fault with relative movement shown.
  - Devonian thrust and reverse fault with teeth on upper plate.

- North-west Tasmania Devonian folds, hinge trace of major fold - symmetrical syncline, overthrust syncline, asymmetrical fold with dip direction of axial surface indicated.
- North-west Tasmania Devonian folds, hinge trace of plunging minor fold indicating sequence involving steep plunge - over-riding up to north-east, cylindrical, over-riding down to south-west in inverted sense.
- West Tasmania Devonian folds, hinge trace of major fold - symmetrical anticline, asymmetrical syncline, overturned syncline, asymmetrical plunging fold with dip direction of axial surface indicated.
- West Tasmania Devonian folds of dominantly earlier generation - West Coast Range / Kilmoryhan Peak trend, Longford / Hillport trend.
- West Tasmania Devonian folds of dominantly later generation - Zwen / Gormanston trend, Deloraine / Ralston trend.
- Primary cleavage (slipping, vertical) associated with probable Devonian folds.
- Hinge trace of antiformal syncline.
- Devonian cleavage (slipping, vertical) associated with probable Devonian movement.
- Major Precambrian folds in comparatively unmetamorphosed rocks. Trace of antiformal, syncline hinge, overturned limb of fold with unroofed hinge.

- CAMBRIAN PALAEOGEOGRAPHICAL ELEMENTS**
- 1 Dundee Trough
  - 2 Mt Reed Volcanic Belt
  - 3 Smithton Trough
  - 4 Dal Range Trough
  - 5 Fanny Mtn Trough
  - 6 Adairfield Trough
- All named Devonian Blocks were generated, Cradle Mountain and Prince of Wales Range Blocks constituted the Tasman Block during earlier Devonian folding and, in the Late Carboniferous to Early Cretaceous, the Tasmanian Craton.

**REFERENCE**

HOLOCENE - LATE CARBONIFEROUS: Flat-lying deposits with Jurassic detrital sheets and Tertiary basalt flows.

**WESTERN TASMANIA**

LOWER DEVONIAN - SILURIAN: Angular unconformity attributed to Devonian Orogeny. Eilon Group and correlates. Sandstone - mudstone sequences. Joice Group and correlates: Lower sequences of dominantly siliceous conglomerate and sandstone, (e.g. Owen Conglomerate); upper sequences of Gordon Limestone.

ORDOVICIAN: Usually angular unconformity in north and parts of west attributed to Cambrian movements.

CAMBRIAN: Fossiliferous and unfossiliferous sedimentary sequences (SMBM); dominantly acid - intermediate volcanic rocks (S-V); dominantly basic volcanic rocks (S-B).

EOCAMBRIAN: Massive dolomite and other early trough deposits. Angular unconformity attributed to Penguin Orogeny and older Frezeman Orogeny.

PRECAMBRIAN: Comparatively unmetamorphosed sandstone - mudstone sequences. Metamorphic rocks of dominantly pelitic sequences, orthoquartzitic sequences and amphibolite, with structural trend lines shown.

**EASTERN TASMANIA**

LOWER DEVONIAN - TREMADOCIAN: Mathinna Beds of micaceous quartzite turbidite sequence.

**IGNEOUS ROCKS**

LOWER CARBONIFEROUS - UPPER DEVONIAN: Dominantly alkali-feldspar granite. Dominantly adamellite (S-type). Dominantly granodiorite (I-type).

CAMBRIAN - EOCAMBRIAN: Granite. Dominantly acid - intermediate volcanic rocks. Coarser grained basic rocks. Serpentine and associated rocks. Dominantly basic volcanic rocks.

PRECAMBRIAN: Debitrite. Dominantly adamellite (King Island).

