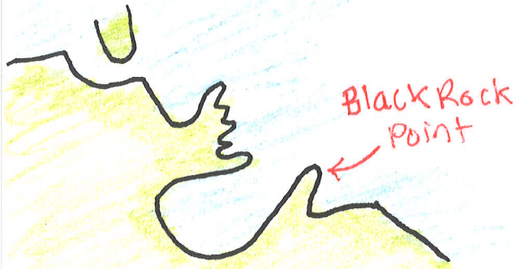
# BLACK ROCK POINT

Black Rock Point is a 50 metre high peninsula that runs 200 metres into the sea and serves as the southern headland for Taylors Mistake bay. over the last 6000 years, the process of headland retreat has been active creating a series of caves at the high-water mark, along with a submeged stump at the end of Black Rock Point.




## FACT FILE

LANDFORM
Peninsula with caves and stump

TYPE
Erosion feature

PROCESSES.
Headland retreat, refraction, hydraulic action, attrition, abrasion weathering, haloclasty

KEY FACTS.
Peninsula 200m long 50m high
6000yrs ago, 3500yrs arch, 1000yrs collapsed.
Stump is 30m², 20m from point.

waves approaching from the east refract around Black Rock Point, concentrating energy on all sides of the peninsula. The high energy waves expose cracks in the jointed basalt rock.

concentrated wave energy

6000 years ago

over time, the erosion from waves makes the cracks wider. The jointed basalt breccia means the head land is easily eroded in some parts

5000 years ago

cave

Hydraulic action acts on the weaknesses and joints in the basalt breccia, creating a series of caves along the cliff face of the headland.

3500 years ago

arch

Around 3500 years ago, the concentrated wave energy enlarged one of the caves (and a cave on the opposite side of the peninsula), and eroded them completely through to form an arch.

1000 years ago

the material from the collapsed arch was broken down by attrition and transported away.

stack

climatic processes of weathering and haloclasty acted on the roof of the arch, eventually weakening it so much it collapsed into the sea 1000 yrs ago, leaving an isolated column of rock, known as a stack.

Today

stump

Hydraulic action and abrasion acted on the stack, wearing away the front and sides of the stack, so now the column is worn to sea-level and is known as a stump. The remnants of a 30m² stump lie 20m off Black Rock Point.