

KOOTENAY LAKE GEOLOGY

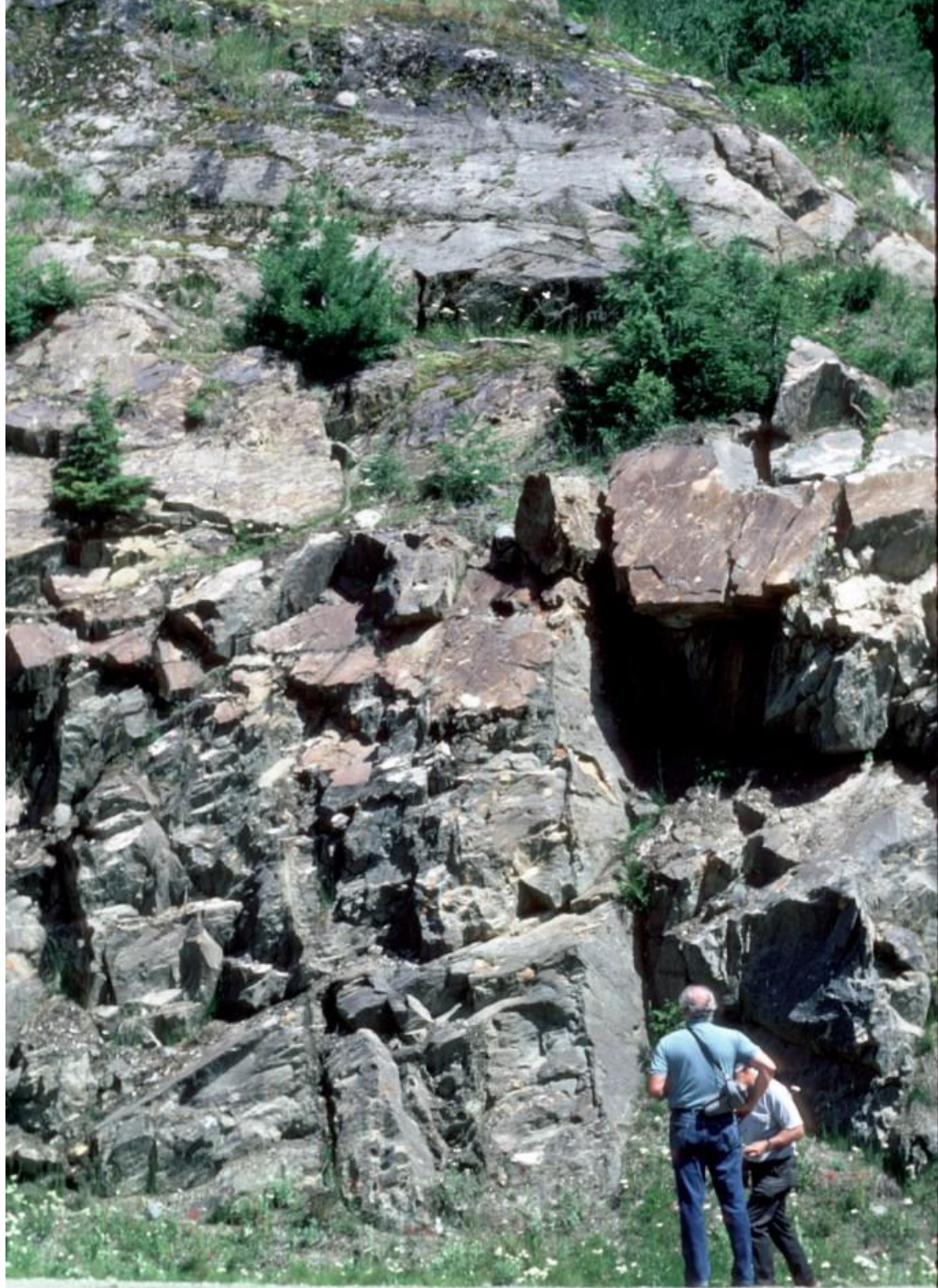










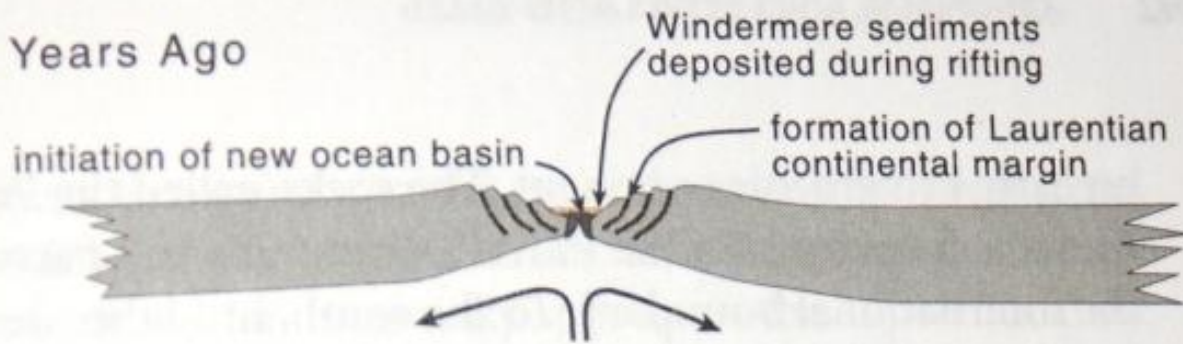




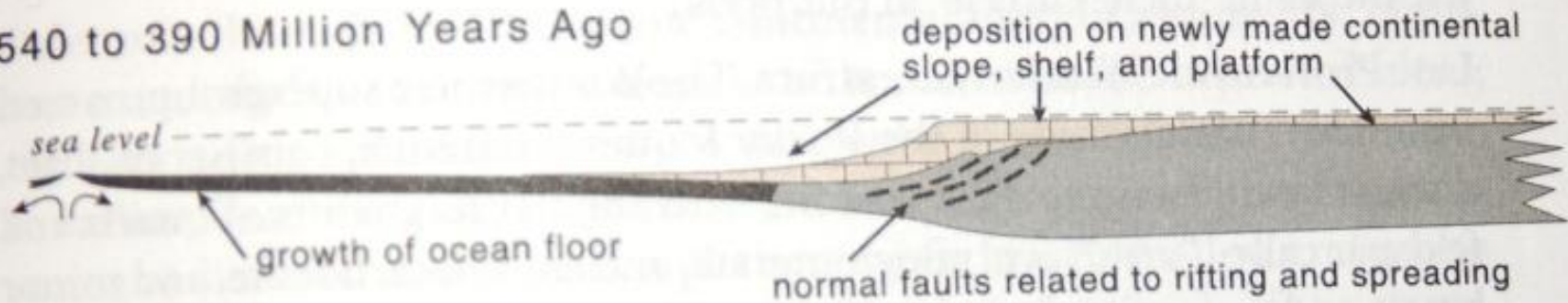




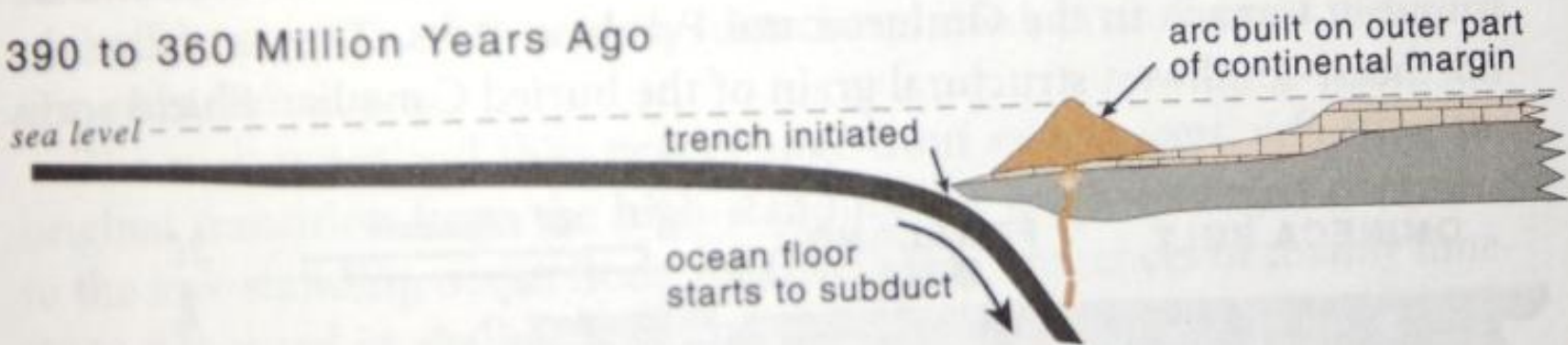
750 to 540 Million Years Ago



540 to 390 Million Years Ago



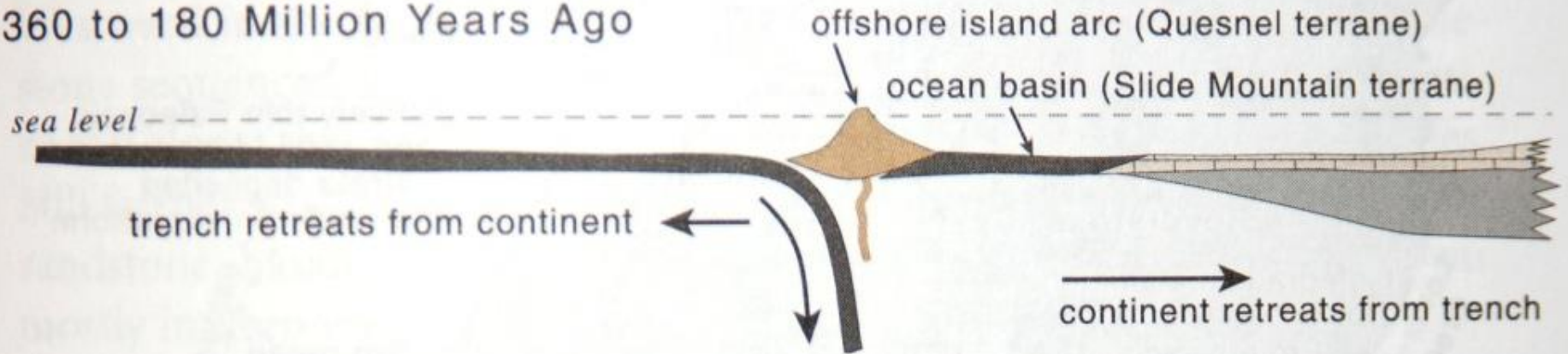
390 to 360 Million Years Ago



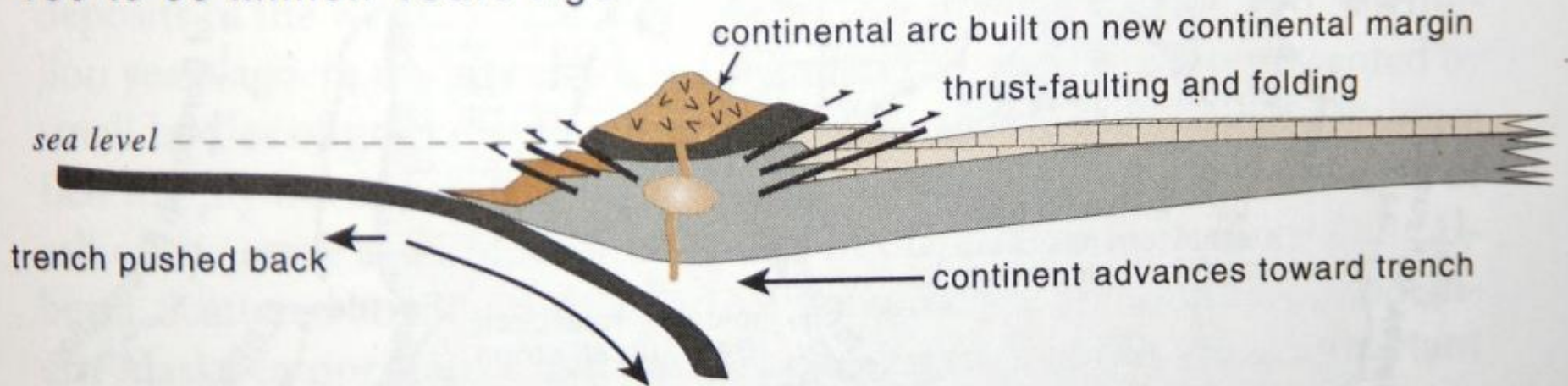
island arc (Quesnel terrane)



360 to 180 Million Years Ago



180 to 60 Million Years Ago



Evolution of the southeastern Canadian Cordillera from the time of initial rifting of the supercontinent Rodinia to later stages of crustal thickening and mountain building. A. In late Proterozoic time, the supercontinent Rodinia rifted apart. B. From late











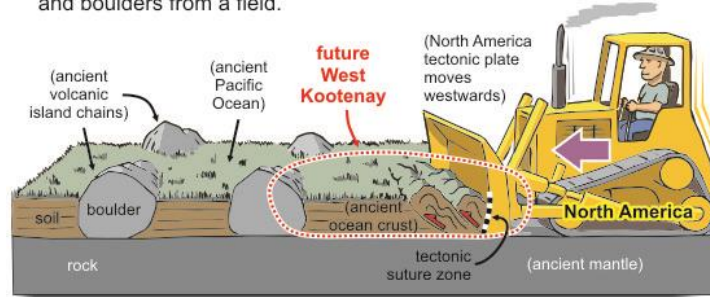




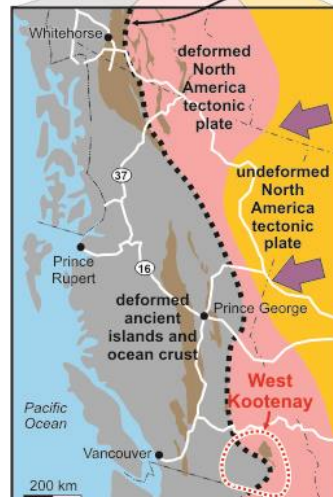
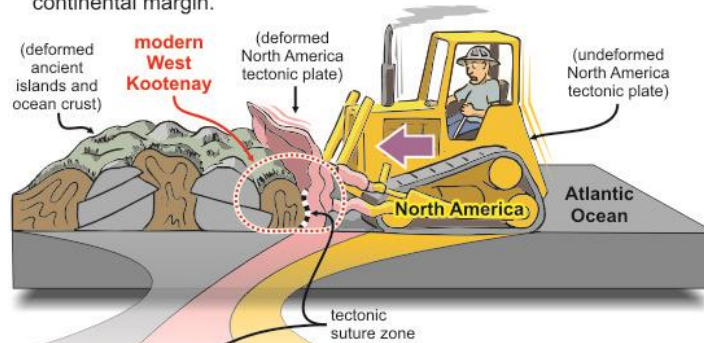
How BC was built and

West Kootenay came to be: an analogy

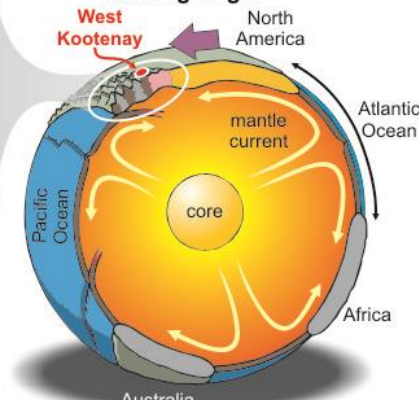
170 million years ago. As the Atlantic Ocean began to open, North America moved westwards and collided with nearby ocean floor and volcanic islands, in a process somewhat like a bulldozer pushing soil and boulders from a field.

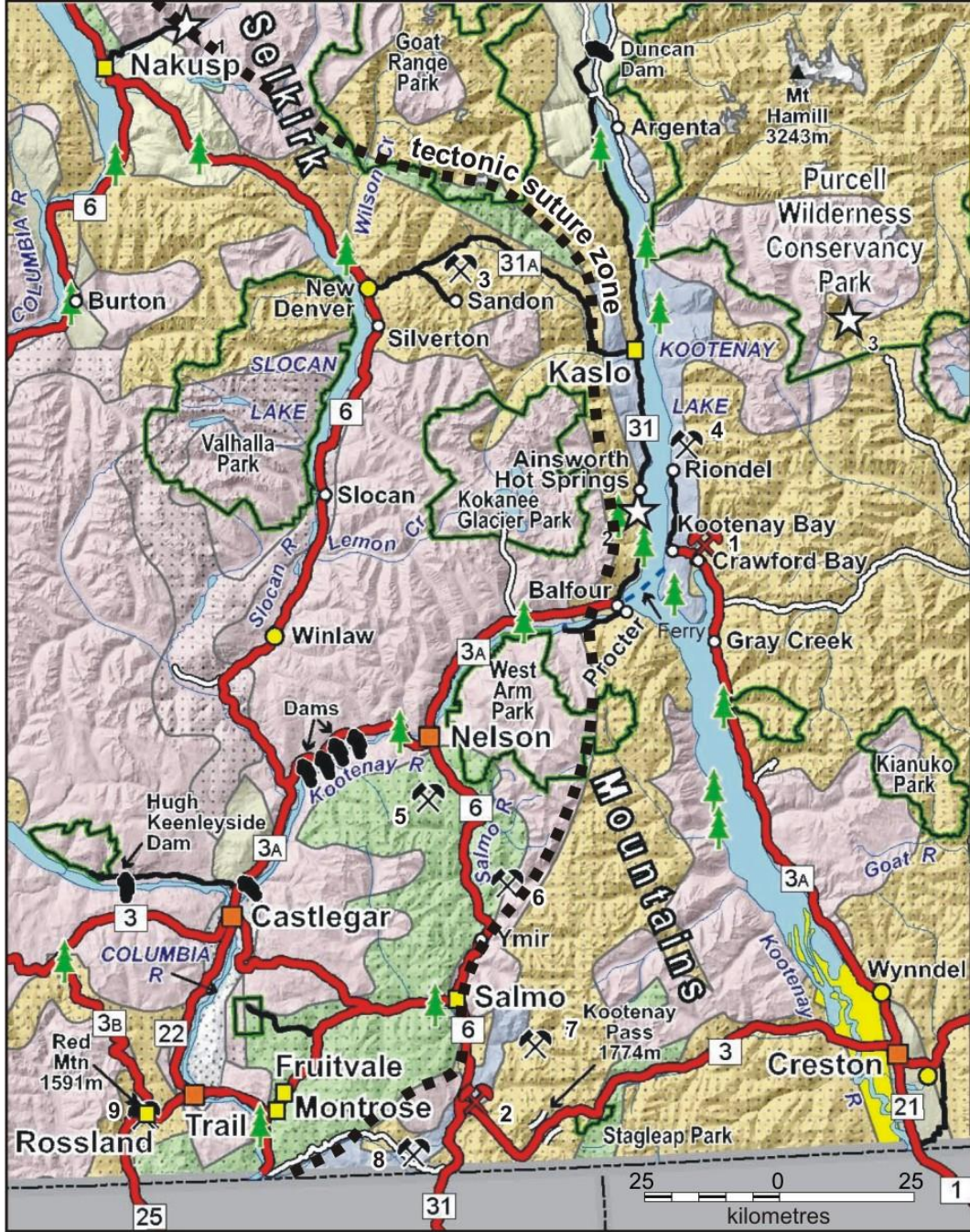


Today. BC's landmass is a collision zone of deformed volcanic islands, sea floor, and North American continental margin. The West Kootenay includes deformed ancient islands and North American continental margin.



B.C. - North America's leading edge





Map Legend

Modern sediment

Mud, sand, and gravel (river deposits)

Ice Age sediment

Till (glacial debris)

Rock

Limestone and dolomite

Metamorphic (altered) sandstone and shale

Metamorphic (altered) volcanic rock

Granite

Gneiss

Population

10,000 - 50,000

Active mines

1. Crawford Bay (dolomite)

2. ...

3. ...

4. ...

5. ...

6. ...

7. ...

8. ...

9. ...

■■■ tectonic suture zone











