

formations which range in age from lower Paleozoic or older to Recent, and include igneous and sedimentary members as well as certain metamorphic rocks of obscure origin.

The oldest rocks consist of a group of pre-Devonian schistose and gneissoid members as well as some limestone bands. These have been invaded by and, in places, extensively buried under a widespread group of Devonian (?) andesites, andesitic tuffs, diabase, diorite, and magnesite. During Devonian-Carboniferous time several thousand feet of sediments accumulated, which are now limestones, slates, and possibly cherts. The cherts are of somewhat obscure origin, and occur in only a few small areas, but are everywhere associated with the slates. The limestones are very extensive and have an aggregate thickness of at least 5,000 feet.

Overlying the limestones, the more recent of the Devonian-Carboniferous rocks, are Jura-Cretaceous conglomerates, sandstones, shales, greywackes, tuffs, slates, and quartzites, having a thickness in places, of over 5,000 feet.

The Coast Range granitic intrusives that compose the Coast range and also form dykes, stocks, etc., in the Yukon Plateau region, are in most places, greyish, coarsely textured, granodiorites, and are generally described as having been intruded in Jurassic time. The evidence obtained in Taku Arm belt, however, shows that they were intruded during different, and widely separated periods, some before and some after the deposition of the Jura-Cretaceous sediments.

The Jura-Cretaceous sediments and the Coast Range granitic intrusives, as well as the various rocks of the district older than these, have been pierced by various volcanics and in places have been covered by a considerable thickness of lavas and associated tuffaceous accumulations. These volcanics range in age from late Cretaceous or early Tertiary to Pleistocene and include andesites, andesitic tuffs, granite-porphry, basalts, basalt tuffs, rhyolites, and rhyolitic tuffs. Overlying all the consolidated geological terranes of the district are Pleistocene and Recent accumulations, consisting chiefly of gravels, sands, clays, silts, muck, peat, and soil, which deeply floor the main valley bottoms and also extend well up the side hills and in places even occur abundantly on the uplands and mountain summits.