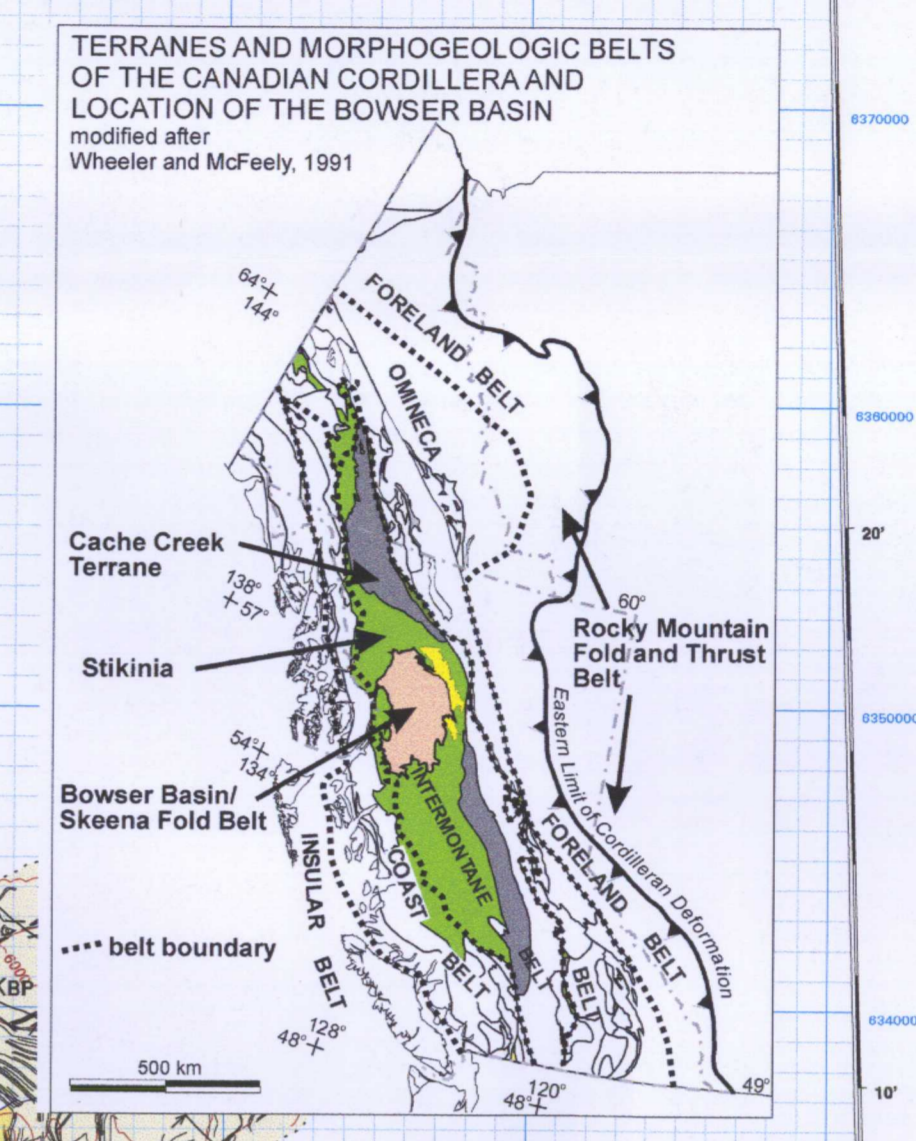
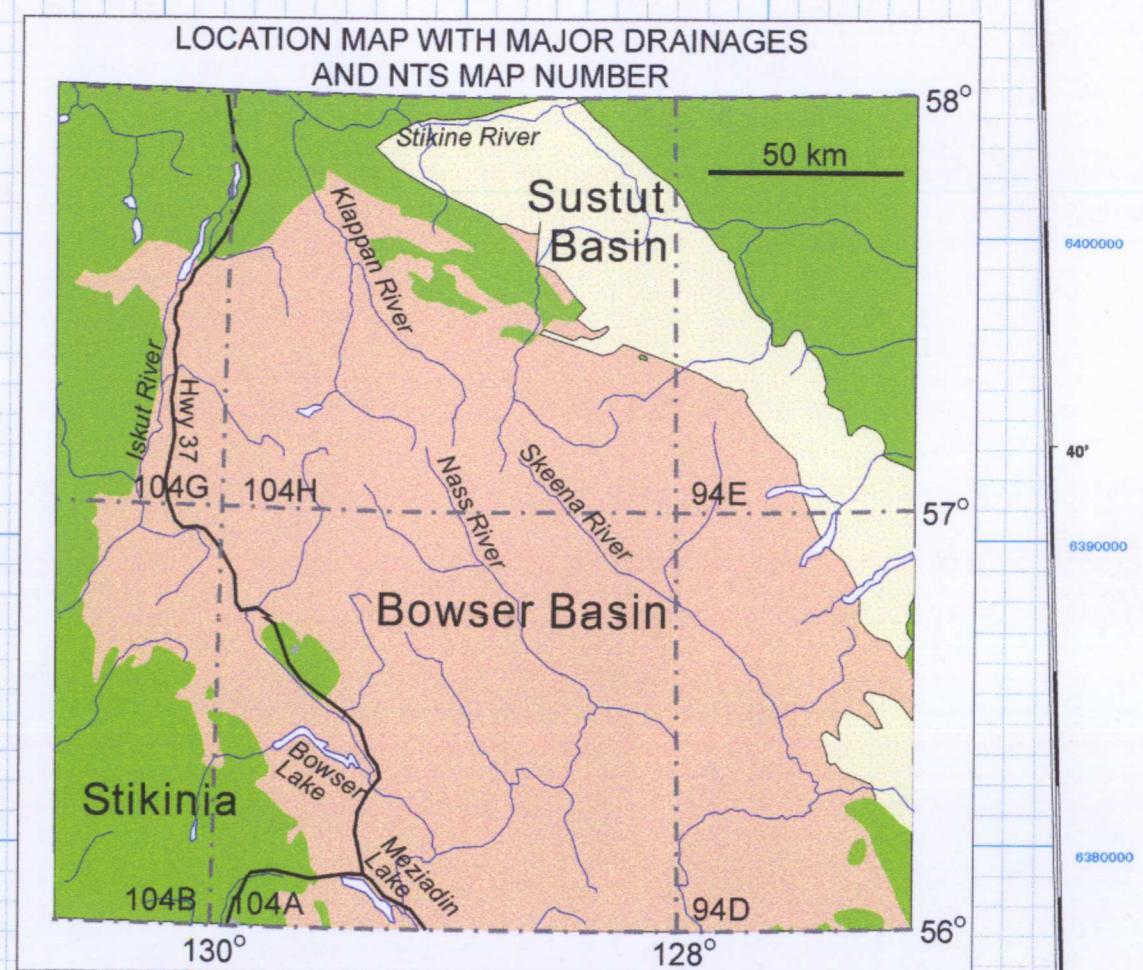


Fossils and Facies of the Northern two-thirds of the Bowser Basin, British Columbia



Fossils and facies of the northern two-thirds of the Bowser Basin (see accompanying report for more explanation). This map shows the locations and ages of fossil collections in the northern two-thirds of the Bowser Basin on a background of mapped sedimentary facies of the basin. Combined, these data sets are the basis for interpretation of the depositional history of the basin. A list of sites with Middle Jurassic fossils from underlying strata, and Cretaceous fossils from overlying strata, are included for reference. Detailed data is included in the accompanying report.

Most collections from the Bowser Lake Group for which the age could be determined are of marine macrofossils. More than 650 collections of macrofossils were examined by T.P. Poulton, H.W. Tipper, G. Jankov, H. Frieboel, G. Jankov, G. Jankov, G. Jankov, and J.W. Heggen. Age was determined for 548. Many macrofossils collected during regional mapping have not been studied. Plants in the vicinity of the Grounding coalfield are described by MacLeod and Hill (1991b). Well preserved microfossils within the Bowser Lake Group are rare. Of the 128 samples of lake shales or shales processed for palynomorphs, 35 were barren and 93 have identifiable forms but no age could be assigned. 32 were given a large-ranging age, and only a few were given a narrow-ranging age. The samples were processed and identified by E.H. Davies of Stratigraphic Ltd. R.W. Silliman, A.S. Sweet (GSC) and S. MacLeod. In general, these samples have a high maturation level and preservation is poor. Palynomorph locations not shown on this map include 14 from the Grounding coalfield reported by H. Cockburn (1986), 10 identified by G. Brown, and a few of unknown specific location in the same region, reported by Moffat et al. (1986). Of 77 samples of siltstone, limy siltstone and silty limestone processed for radiolarians, E.B. Carter determined ages for 9; the rest were barren, or had taphonomic, tectonic, or radiolarians too poorly preserved to be identified. If Cordey reported on Early Jurassic and older radiolarians in chert clasts from Bowser Lake Group conglomerate.

Previous regional mapping in the northeast-most Bowser Basin by Edincher (1974), Richards and Gilchrist (1976), and Grist and Tipper (1981) established a framework from which to begin systematic mapping of the basin. Facies of the Bowser Lake Group shown on this map are interpreted primarily from mapping by C.A. Evonchik (1982), M. Mustard, G.M. Green, and C.J. Greg (Evonchik, 1981 to 1992; 1992a,c; Evonchik and Thorslund, 1993; Evonchik et al., 1993, 2000; Evonchik and Porter, 1993; Green, 1992; Greg and Evonchik, 1993). Geological contacts for 104B are from Lewis (1996).

Composite symbols are read with the bottom representing the lower age limit and the top representing the upper age limit. Lower case letters and are used to qualify specific identifications which are indicated with upper case E, M, and J. The Cretaceous stages are represented with the first three letters of the stage name. Example: The following symbol denotes a macrofossil of Late Cretaceous to Kimmeridgian age. This age has been assigned with a high degree of confidence.

Geological legend table with columns for geological eras (Quaternary, Cenozoic, Tertiary, Paleogene, Mesozoic, Paleozoic) and specific geological units/fossils. Includes symbols for faults, bedding planes, and other geological features.