Classic Canadian Rockies Geology From the mountain front to the Rocky Mountain Trench, including the communities of Canmore, Banff and Lake Louise in Alberta, and Field and Golden in British Columbia **Cross-section** from southwest (A) to northeast (B) Geological column and map legend Montage of Geological Survey of Canada maps arising from Operation Bow-Athabasca Geology by R.A. Price and E.W. Mountjoy, J.D. Aitken, J.A. Allan, H.R. Balkwill, H.U. Bielenstein, D.G. Cook, D.B. Corneil, K.L. Currie, W.H Fritz, D.A. Gardner, D.W. Gibson, G.B. Leech, R.W Macqueen, I.A. McIlreath, B.S. Norford, D.K. Norris and N.C. Ollerenshaw Montage by Ben Gadd, 2020 All rock units shown are sedimentary or low-grade metamorphic (slate, phyllite), except for a few smalligneous intrusions (dykes, sills) and the Ice River Complex, which is an intrusive body covering 30 km² in Yoho and Kootenay national parks. Except as noted, all rock units are marine (deposited in the sea). Individual rock-unit thicknesses can vary consideral across the mapped area. The figures given are typical Fernie Formation Thickness 370 m. Shale, siltstone, sandstone, limestone. Detailed information about these rock units is available at weblex.nrcan.gc.ca/weblexnet4/LithoSearch_e.aspx Whitehorse Formation of the Spray River Group Thickness 100 m. Siltstone, sandstone, mudstone, limestone, dolostone breccia. geological maps published at a scale of 1:50,000 by the Geological Survey of Canada, 1970–1980 Golden West, Map 1497A, 1980 Golden East, Map 1496A, 1977 3. Lake Louise West, Map 1483A, 1980 4. Lake Louise East, Map 1482A, 1980 5. Mount Eisenhower West, Map 1297A, 1972 3. Lake Minnewanka East, Map 1271A, 1971 9. McMurdo West, Map 1502A, 1979 10. McMurdo East, Map 1501A, 1979 11. Mount Goodsir West, Map 1477A, 1979 12. Mount Goodsir East, Map 1476A, 1978 13. Banff West, Map 1295A, 1972 14. Banff East, Map 1294A, 1972 15. Canmore West, Map 1266A, 1970 16. Canmore East, Map 1265A, 1970 Unconformity: a buried erosion surface. Layers have been lost, Whiskey Trail Member of the Beaverfoot Formation Thickness 30 m. Shaly dolostone. Map notes Undifferentiated Cathedral, Stephen, Eldon and Pika formations in Arctomys, Sullivan, Lyell, Bison Creek and Mistaya formations Undifferentiated Cathedral, Stephen, Eldon, Pika, Arctomys, Waterfowl, Sullivan, Lyell, Bison Creek, Mistaya and Survey Peak formations Eldon Formation Thickness 240 m in Mt. Laurie / Îyâmnathka (Yamnuska), but base cut off by a fault. Unfaulted thickness, as seen in upper cliffs of Castle Mountain, 590 m. Limestone. Cathedral Formation Thickness 590 m. Limestone, dolostone. Age and thickness data are from the geological maps and cross-sections in this montage, updated with info from weblex.nrcan.gc.ca. Diagram by Ben Gadd 2020