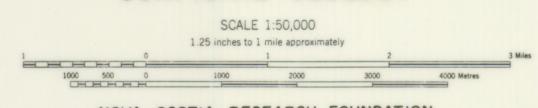


WEYMOUTH 21A/5W

SURFICIAL GEOLOGY



NOVA SCOTIA RESEARCH FOUNDATION CORPORATION

DESCRIPTIVE NOTES

GENERAL

The Weymouth map area is underlain by the metamorphic rocks of the Meguma Group in the western one-third and by Devonian granite in the remainder of the area. The granite supplied only a small amount of debris to the ice sheet, while much was contributed by the impure slates and quartzites in the western part.

The western one-third is . liberally covered with drumlins

which are red-brown in colour and whose material is derived mostly from the areal bedrock and the Triassic rocks to the north. The drumlins are scarce in the eastern granitic area except in the north where they occur south of the Devonian sedimentary and Meguma areas.

KAMES

A large kame area occurs about two miles east of Plympton Station and several areas are found south of Fifth Lake, in the Sporting Lake - White Sand Stream area. Smaller ones occur on the south side of Fifth Lake, at the southern end of Mistake Lake, near the powerhouse at Sissiboo Falls, northeast and west of

Danvers Lake, southeast of Easton, and south of Oliver Lake. A small one occurs north of Provost Lake. These kames vary widely in constit-uent materials.

A long, intermittent esker may be traced from the old Staline settlement at Nev France eastward to Whitesand Lake, a distance of about twenty-two miles. Another eastward-trending esker appears about two miles to the north and extends into the Kejimkujik Lake map area. Southward, traces of eskers may be found from the Cariboo River to Little Pine Lake and Sporting Lake. Another broken esker extends from about 1 1/4 miles southeast of Big

Pine Lake, to Oakland Lake and Pine Lake, and beyond into the Kejimkujik Lake map area. Smaller ones are associated with the Mistake Lake kames, and occur as well along the north side of the Sissiboo River between Weymouth and Weymouth Mills, south of Bill Lake, and west of Porcupine Lake and the Sissiboo River. A small esker is found on the New France road about two miles southeast of Barn Lake, and one south of Fourth Lake has been largely removed for construction purposes prior to the area being flooded by the Sissiboo River.

DELTAS Deltas are to be found in Weymouth north and to the southwest of Johnson Lake.

LEGEND DRUMLIN & MORAINE ********** KAME **ESKER** DELTA TILL AREAS (undiff.) 平平平

SWAMP ROADS & TRAILS ~ STREAMS -> GLACIAL STRIAE

ICE STAGES/SUB-STAGES

Generally, surface drift appears to be confined to the Late Wisconsin stage with the possibility of some interplacial sediment about a mile north of Gilbert's Cove, in the area west of the small stream. Local glacial action is also indicated. A cut on the north side of the Sissiboo River at Weymouth Mills indicates at least three tills, the oldest one being very highly compacted. The absolute age of these is unknown, but the lowest one may be pre-Wisconsin, and the top is Mankatoan or that of the local glaciation which apparently ended the Pleistocene in Nova Scotia.