ELLEF RINGNES ISLAND: ISACHSEN AREA, MAY TO SEPT. 1959.

Denis St. Onge......Party Chief Richard M. Moskal. Assistant, Western U. 4<sup>th</sup> Year.

EXPEDITION PURPOSE: To research the topography and geography of the area using the most current, 1958 areal photos.

EXPEDITION SPONSERS: Department of Mines and Technical Surveys, Geographic Branch, Ottawa, Ontario.

Polar Continental Shelf Program.

NOTES: The comments noted below with respect to the green, numbered slides, are based on current personal recall, memory as of 2019/20. To the best of my knowledge there was no R. Moskal daily personal diary available of the 1959 expedition.

The green numbered slides, (60) are co-related to the topography map, "Isachsen", District of Franklin, North West Territories, Scale 1::50,000. This map was compiled in 1962 by The Department of Mines and Technical Surveys.

The slides with notes/comments are circled in green on see through vellum paper and over lain on the above Isachsen topographical map.

SLIDE ACQUISITIONS: It is noted that all the slides are either duplicates or not required as part of the expedition purposes, and freely given to either the expedition chief or assistant for their own personal use.

SLIDES (58)- ELLEF RINGNES ISLAND: ISACHSEN AREA, 1959.

SITE: ISACHSEN. Lat. 78d 47m N. Long. 103d 30m W

SITE: Resolute Bay, May 1959.

SLIDES: 1. RCAF Resolute Bay Station.

2. Richard Moskal in Resolute Bay.

SITE: Isachsen Area, May to September, 1959.

SLIDES: There are no specific dates noted, as no R. Moskal daily diary available.

- 3. Beaver Aircraft landing on wheels in Isachsen. Early model of snowmobile by Bombardier.
- 4. Beaver Aircraft, on skis, MacMurray Air Service, Ltd. Isachsen.
- 5. Beaver Aircraft being loaded with supplies. Isachsen.
- 6. Walking to Rat Lake (our name) for topographical research.
- 7. Rat Lake area topography located north east of Isachsen. Early model snow tracked vehicle pulling equipment trailer.

- 8. Field expedition preparations for areas north of Isachsen with Beaver aircraft flying in supplies.
- 9. Tracked experimental snow mobile. Richard Moskal holding the flag of the, "Geographical Branch, Isachsen, N W. Territories H.Q", The Department of Mines and Technical Surveys, Ottawa.
- 10,11. Preparing sea ice surface for black dirt experiments with Isachsen in background. In measured 1.0 meter squares different dirt materials were laid to measure heat absorption from the suns rays and to measure impact of melting on sea ice. Note the experimental tracked snow mobile.
  - 12. Experimental snow mobile with trailer. Tracked well on frozen ground and dry snow. Not good on wet soil as tracks clogged with mud.
  - 13. Denis St Onge working on dirt sea ice experiment off the coast of Isachsen.
  - 14. Close- up slide of various black materials melting the sea ice from rays of sun.
  - 15. Typical mountain features, topography, around the hamlet of Isachsen.
  - 16. Denis St Onge and Richard Moskal cleaning mud from tracks of our snow mobile. Most frustrating. Quonset hut, our building for sleeping and accommodating equipment. Very comfortable. 17,18,19. Crossing a low marshy pond area with the tracked vehicle, which also floated in deeper water, therefore no traction. Trying to pull the stuck machine up a slight bank. St Onge and Moskal with another scientist, pulling.
  - 20,21. Tracked vehicle is permanently stuck in the mud. Vehicle was left in the mud and we returned to our field camp. Soil froze to recover.
  - 22,23. Field camp site on an expedition into interior, north of Isachsen. Very barren area, with no vegetation, no animals or seals. Travel was on foot, very difficult, with back packs. Explorers in picture are Denis St Onge and Richard Moskal.
    - 24. Hardened lava material with weathered soft scorched rock material abutting the lava material. Located on top of a high rock ridge, north of Isachsen.
    - 25. Lava hardened material that has weathered and broken away and falling down side of ridge. Very sharp, hard and angular.
    - 26. In the valleys, softer silt materials moved by melt waters to the sea. Lava material still standing at top of ridge. Very hard and slow to erode.
    - 27. Embankment along a river, melting and quickly eroding. A good example of sun's warm rays on permafrost in the embankment material, which then flows over layers of ice and freezes later in colder weather.

- 28. General view of permafrost and ground cover melting due to sun's warm rays. This natural process is very active over a very short summer period.
- 29. Richard Moskal stuck in a gully trying to cross. Snow was wet and slushy with a stream flowing below. Ground above very muddy, like gumbo and it stuck to your boots. Area was very barren. Foot tracks across snow on right, by St Onge.
- 30. General topographic view of area around Isachsen, showing summer erosion.
- 31. Denis St Onge and Richard Moskal and two fellow scientists on field expedition around Isachsen area. Note the fellow with found musk ox horns. Not sure where he found them as there is little vegetation on the island for animals to live on. Geogrphic Branch flag flying in the background.
- 32. Denis St Onge taking field notes at Louise Bay, south of Isachsen.
- 33. Meltwater streams eroding the landscape and flowing into the sea, ie Louise Bay. Note in the picture, a "pingo". Very visible on aerial photos, but no known field pictures, prior to this.
- 34. Coloured mosses and lichens.
- 35. Arctic yellow poppies, with ring belonging to Denis St Onge. The sun's warm rays quickly open the flower buds, but the flower is short lived.
- 36. Another arctic flower, name unknown. A nice bright red hue.
- 37. Constructing an anchor hole in the permafrost for support lines to an aerial communication tower at Isachsen. A hot air "steam jenny" was used to bore into frozen soil and permafrost.
- 38. General view of topgraphy and land forms on Ellef Ringnes Island, Isachsen area. Much erosian evident in the summer months and difficult to traverse.
- 39. Example of slumping hill sides due to melting of ice lenses in the soil. Material is carried to the sea.
- 40. Close example of hill side erosion due to melting of ice in soil.
- 41. Isachsen community. Workers preparing ground for a building construction. Note a musk ox in the distant background.
- 42,. Coastal rock formations on the east coast of Ellef Ringnes Island. Yellow Arctic poppies visible.
  - 43. Richard Moskal viewing a most beautiful coastal scene on east side of Ellef Ringness Island.
  - 44. Impressive coastal heights and rock formations on east coast of Ellef Ringness Island.
  - 45. Isachsen weather station in summer. The coastal sea ice has melted. Same coast where we did the sea ice black dirt experiments earlier in the summer.
  - 46. Richard Moskal at Isachsen. The beard has grown and I returned to Ottawa with it still intact.
  - 47. Impact of a small stream as it enters the sea waters and ice. Sea ice is melting and broken into bits, but will start freezing quickly in a month or sooner.
  - 48. Soil erosion is constant and very natural on the Island. Huge ice lenses below the ground melt quickly and the fine sandy and gravelly wet soils slump away by the forces of gravity.

- 49. Example of how large land areas are being naturally eroded and soils eventually moved to the sea. Interior of Ellef Ringnes Island.
- 50. 51. A very large river delta of water and eroded soil materials entering the sea. The sea ice at this location is permanent, except along the shore. Blue water on ice are surface melt water ponds and not open water.
- 52 Close up view of tundra soil erosion and gravity movement. Permafrost ice, when melted made excellent tea or coffee.
  - 53. An example of tundra topography, with a meadow of Arctic poppies.
  - 54. 55. Arctic fox, lonely and skinny in the barren tundra environment.

SITE: CHURCHILL, MANITOBA, Sept. 1959.

SLIDES: 57.58. Shoreline of west coast of Hudson Bay at Churchill. Granite boulders with scrubby, stunted, very old Spuce trees.

- 59. Trans Air Limited airplane for our flight from Churchill to Ottawa.
- 60. Trans Air Limited, two engine float plane with water or ground landing facilities.

END OF SLIDES. ELLEF RINGNES ISLAND. 1959.

26 Jan. 2020