BIBLIOGRAPHY RESOLUTE 58F

GENERAL REFERENCES

Bain, H.D., D. Thomson, M. Foy, and W. Griffiths. 1977. Marine Ecology of Fast-ice Edges in Wellington Channel and Resolute Passage, N.W.T. In: A.D. Sekerak (ed). Studies of the Ecology of Fast-ice Edges in the High Arctic. Unpublished Report by L.G.L. Ltd. for Polar Gas Project.

Bissett, Don. 1968. <u>Resolute: An Area Economic Survey.</u> Department of Indian Affairs and Northern Development. Industrial Division. Ottawa.

Buchanan, R.A. and W.E. Renaud. 1977. The Marine Ecology of Lancaster Sound and adjacent Waters: An Annotated Bibliography. Unpublished Report prepared by L.G.L. Ltd., Toronto for the Institute of Ocean Sciences, Fisheries and Environment, Victoria, B.C. Canada, Department of Fisheries and Environment. 1970. Pilot of Arctic Canada. Vol. 1, 2nd Edition. Canadian Hydrographic Service, Ottawa. Canada. Geological Survey. 1970. <u>Geology and Economic Minerals of Canada.</u> Economic Geology Report No. 1. Department of Energy, Mines and Resources. Ottawa. Collin, A.E. 1962. <u>The Oceanography of Lancaster Sound</u>. Ph.D. Thesis, McGill University, Montréal. Department of Indian Affairs and Northern Development, 1980. <u>The Lancaster Sound Region: 1980 - 2000</u>, Green Paper Draft. Perspectives and Issues on Resource Use. Preliminary Data Atlas. Prepared by the Working Group on the Lancaster Sound Region Study. December 1980. Fisheries and Environment Canada. 1978. <u>An Arctic Atlas</u>. Background Information for Developing Marine Oilspill Countermeasures. Arctic Marine Oilspill Program Report. EP-9-EC-78-1. Environmental Impact Control Directorate. August 1978. Freeman, M. Research Ltd. 1976. <u>Inuit Land Use and Occupancy Project.</u> 3 Vols. Prepared for the Department of Indian and Northern Affairs. Ottawa. Koring, Paul. (ed) 1977. <u>Canada North Almanac</u>. Research Institute of Northern Canada. Yellowknife, Northwest Territories. Markham, W.E. 1977. Ice Climatology of Lancaster Sound. Unpublished technical report, Atmospheric Environment Service. Toronto. Mayne, R.E., and G.T. Govier. 1977. <u>Settlements of the Central Arctic-</u>
<u>Keewatin Region: Community Profiles and Regional Hierarchies</u>, Vols. I and
II. Report for the Polar Gas Project by Underwood, McLellan and Associates
Ltd. Milne, A.R. and B.R. Smiley. 1978. Offshore Drilling in Lancaster Sound:

Possible Environmental Hazards. Institute of Ocean Sciences, Department of Fisheries and Environment. Sidney, B.C. Nettleship, D.N., and P.A. Smith, eds. 1975. <u>Ecological Sites in Northern Canada</u>. Canadian Committee for the International Biological Programme, Conservation Terrestrial - Panel 9. Ottawa. Norlands Petroleum Ltd. 1978. <u>Environmental Impact Statement for Exploratory</u> Drilling in the Lancaster Sound Region. . 1977. <u>Submission in Support of an Application</u>
<u>for Drilling Authority to Drill Norlands Magnorth Dundas K-56, Lancaster</u>
<u>Sound, N.W.T.</u> Approval-in-Principle Submisison. Calgary. Roots, E.F. (ed). 1980. <u>Lancaster Sound: Issues and Responsibilities.</u>
Canadian Arctic Resources Committee. Ottawa. Rosenberg, Gertrude. 1979. <u>Current and Recent Research and Studies Relating to Northern Social Concerns.</u> Volume II. NSRD 79-1. Northern Social Research Division. Department of Indian Affairs and Northern Development, . 1978. North of 60. <u>Current and Recent Research and Studies Relating to Northern Social Concerns</u>, NSRD 78-1. Northern Social Research Division. Department of Indian Affairs and Northern Development. Ottawa. Shackell, Stewart. 1979. <u>Northern Community Descriptions</u> for Indian and Northern Affairs. Ottawa. Stepney, P.H.R. 1977. <u>A Review of Ocean Currents and Surface Winds of Lancaster Sound.</u> Prepared for Norlands Petroleum Limited by Renewable Resources and Consulting Services Limited. Calgary. Thomson, D., S. Woods and J. Acreman. 1975. Marine Ecology Survey in the Central Portion of the Canadian Arctic Islands, 1974. Unpublished McGill University Report prepared for Polar Gas Project. Travel Arctic. Explorers' Guide '79. Yellowknife, N.W.T. Tri Ocean Engineering Limited. 1978. An Addendum to the Submission in Support of an Application for Drilling Authority to Drill Norlands Magnorth Dundas. K-56, Lancaster Sound, N.W.I. Norlands Petroleums Ltd.

ECOLOGICAL OVERVIEW

Barrie, W.B., B.D. Bornhold, D.A. Hodgson, R.G. Jubb, P. McLaren, and R.B. Taylor. 1978. <u>Coastal Reconnaissance for Marine Terminal Planning.</u> G.S.C. Open File 633, 3 Vol. Energy, Mines and Resources, Ottawa. Barnett, D.M., L.A. Dredge, and S.A. Edlund. 1977. <u>Ierrain characterization.</u>
<u>Cornwallis and adjacent islands.</u> Geol. Surv. Can. Open File 457, Energy,
Mines and Resources, Ottawa. . 1976. Ierrain inventory: Bathurst. Cornwallis, and adjacent islands. Northwest Ierritories, pp. 201-204 in: Rept. of Activities, Part A, Geol. Surv. Can., Paper 76-1A. Energy, Mines and Resources, Ottawa. Blackadar, R.G. 1967. <u>Precambrian Geology of Boothia Peninsula, Somerset Island, and Prince of Wales Island, District of Franklin.</u> Bulletin 151. Geological Survey of Canada. Department of Energy, Mines and Resources. Ottawa. pp. 1-8. Blackadar, R.G. and R.L. Christie. 1963. <u>Geological Reconnaissance, Boothia Peninsula, and Somerset. King William, and Prince of Wales Islands. District of Franklin. Paper 63-19. Geological Survey of Canada. Department of Mines and Technical Surveys. Ottawa. pp. 1-5.</u> Bliss, L.C. 1975. Devon Island, Canada. In: Rosswall, T. and O.W. Heal (eds), Structure and function of Tundra ecosystems. <u>Ecol. Bull.</u> 20:17-60. Swedish Natural Sci. Res. Counc., Stockholm. Boydell, A.N., K.A. Drabinsky, and J.A. Netterville. 1975. <u>Terrain inventory and land classification</u>, <u>Boothia Peninsula and Northern Keewatin</u>, pp. 393-395 in: Geol. Surv. Can. Paper 75-1, Part A. Canada Department of Transport. 1968. <u>Climatic normals</u>: Vol. 1, <u>Iemperature</u>; Vol. 2, <u>Precipitation</u>; Vol. 6, <u>Frost data</u>. Meteor. Br., Transp. Can., Toronto. Canadian Hydrographic Service. 1978. Sailing directions: Arctic Canada. Supply and Services, Ottawa. Conard, H.S. 1979. How to know the mosses and liverworts (2nd ed.). Rev. by P.L. Redfearn, Jr. <u>The Pictured Key Nature Ser.</u>, Wm. C. Brown Co. Publ., Dubuque, Iowa. Craig, B.G. 1964. <u>Surficial Geology of Boothia Peninsula, and Somerset, King</u>
William and Prince of Wales Islands, District of Franklin, Paper 63-64.
Genlogical Survey of Canada. Department of Mines and Technical Surveys,
Ottawa. pp. 1-4. Cruickshank, J.G. 1971. Soils and terrain units around Resolute, Cornwallis Island. <u>Arctic</u> 24(3):195-209. Fortier, Y.O., et al. 1963. <u>Geology of the North-Central part of the Arctic</u>. <u>Archipelago, Northwest Territories</u> (Operation Franklin). Geol. Surv. Can. Mem. 320, Dept. Mines and Tech. Surv., Ottawa. Hale, M.E. 1969. <u>How to know the lichens</u> (2nd ed.). The Pictured Key Nature Ser., Wm. C. Brown Co. Publ. Dubuque, Iowa. Netterville, J.A., A.S. Dyke, R.D. Thomas, and K.A. Drabinsky. 1976. <u>Terrain inventory and quaternary geology, Somerset, Prince of Wales, and adjacent islands.</u> Geological Survey of Canada Paper 76-1A. Ottawa. Porsild, A.E. 1957. Illustrated flora of the Canadian Arctic Archipelago.
Bull. No. 146, Nat. Mus. Nat. Sci., Nat. Mus. Can., Ottawa. Sweet, Walter C., and A.K. Miller. 1957. <u>Ordovician Cephalopods from Cornwallis and Little Cornwallis Islands, District of Franklin, Northwest Territories.</u> Bulletin 38. Geological Survey of Canada. Department of Mines and Technical Surveys. Ottawa. pp. 1-6. Tarnocai, C. and A.N. Boydell. 1975. <u>Biophysical study of the Boothia Peninsula and northern Keewatin</u>, pp. 423-424 in: Rept. of Activities, Part A, Geol. Surv. Can., Paper 75-1A. Energy, Mines and Resources, Ottawa. Taylor, R.B. 1977. The <u>summer climate of Cunningham Inlet, Somerset Island, District of Franklin</u>, Rept. of Activities, Part C, Geol. Surv. Can., Paper 77-1C, pp. 39-48. . 1973. Coastal Environments and processes in the Canadian Arctic Archipelago. Unpublished M.Sc. Thesis, McMaster University.

Ecological Overview (con't)

Taylor, R.B. and S.B. McCann. 1976. The effects of sea and nearshore ice on coastal processes in the Canadian Arctic Archipelago. Rev. Geogr. Montréal 30(102):123-132.

Thompson, D.C. 1980. A classification of the vegetation of Boothia Peninsula and thenorthern District of Keewatin, N.W.T. Arctic 33(1):73-79.

Thorsteinsson, R. 1958. Cornwallis and Little Cornwallis Islands, District of Franklin, Northwest Territories. Memoir 294, Geological Survey of Canada. Department of Mines and Technical Surveys, Ottawa.

Thorsteinsson, R., J. Wm. Kerr. 1968. Cornwallis Island and adjacent smaller islands, Canadian Arctic Archipelago. Paper 67-64. Geological Survey of Canada. Department of Energy, Mines and Resources. Ottawa. pp. 1-4.

Vitt, D.H. 1975. A key and annotated synopsis of the mosses of the northern lowlands of Devon Island, N.W.T., Canada. Can. J. Bot. 53:2158-2197.

Way, D.S. 1973. Terrain analysis: A quide to site selection using aerial photographic interpretation, Chapter 1 (pp. 1-16), Landforms and aerial photographic interpretation, Chapter 1 (pp. 1-16), Landforms and aerial photographic errain analysis. Community Development Series, Dowden, Hutchinson and Ross, Inc., Stroudsburg, Penn.

Woo, V. and S.C. Zoltai. 1977. Reconnaissance of the soils and vegetation of Somerset and Prince of Wales Islands, N.W.T. Info. Rept. NOR-X-186, Nor. For. Res. Centre, Can. For. Serv., Fish and Envir. Can., Edmonton, Alta.

1977. Soils and vegetation of Somerset and Prince of Wales Islands, N.W.T. Info. Rept. NOR-X-186, Nor. For. Res. Centre, Can. For. Serv., Fish and Envir. Can., Edmonton, Alta.

1977. Soils and vegetation of Somerset and Prince of Wales Islands, N.W.T. Info. Rept. NOR-X-186, Nor. For. Res. Centre, Can. For. Serv., Fish and Envir. Can., Edmonton, Alta.

1977. Soils and vegetation of Somerset and Prince of Wales Islands. Maps at 1:125,000 covering NTS map sheet 58C and portions of 58A, B. D., and F.

Wiken, E.B., T.W. Pierce, and G.R. Ironside. 1981. Multistage remote sensing i

WILDLIFE RESOURCES Allison, G.W. 1976. A <u>Summary of Research on Birds, Marine Mammals and Marine Ecology in the Districts of Franklin and Keewatin N.W.T., 1974 and 1975.</u> Prepared for Polar Gas Projewct by L.G.L. Ltd., Environmental Research Associates, Toronto, Ontario. Alliston, W.G., W.S.W. Bradstreet, M. McLaren, R.A. Davis, and W.J. Richardson. 1976. <u>Numbers and Distribution of Birds in the Central District of Franklin.</u>
<u>N.W.I., June-August, 1975</u>. Prepared for Polar Gas Project by L.G.L. Ltd.,
Toronto, Ontario. Vol. I and II. Bain, H. and A.D. Sekerak. 1978. Aspects of the Biology of Arctic Cod, <u>Boreogadus Saida</u>, in the Central Canadian Arctic. Unpublished report, for Polar Gas Project by L.G.L. Ltd., Environmental Research Associates, Toronto Ontario. Bain, H., D. Thompson, M. Foy and W. Griffiths. 1977. Marine Ecology of the Fast-ice Edges in Wellington Channel and Resolute Passage, N.W.T. Unpublished report for Polar Gas Project by L.G.L. Ltd., Environmental Research Associates, Toronto, Ontario. Banfield, A.W.F. 1974. <u>The Mammals of Canada.</u> University of Toronto Press, Toronto. Bartonik, J.C. and D.N. Nettleship. 1979. Conservation of Marine Birds of Northern North America, U.S. Fish and Wildlife Research Report No. 11, Washington, D.C. Bellrose, F.C. 1976. <u>Ducks, Geese and Swans of North America.</u> Stackpole Books, Harrisburg, Pa., U.S.A. Bissett, D. 1968. <u>Resolute, an Area Economic Survey.</u> Vol. II of the Lancaster Sound Survey. 1967. A.E.S.R. 67/1. Industrial Division, Northern Administration Branch, Dept. of Indian Affairs and Northern Development, Ottawa. Boreal Institute for Northern Studies. 1975. Canadian Arctic Renewable Resources Mapping Project. Prepared for Inuit Tapirisat of Canada. Boreal Institute for Northern Studies, University of Alberta, Edmonton. 232 pp. and Boyd, D.H., R.K. Schmidt, W. Hayden, and I.W. Dickson. 1978. Possible Effects of the Proposed Polar Gas Pipeline Project on Living Resource Use in the Eastern Arctic. AIPP Preliminary Report 1977. ESCOM Report No. A1-02. Prepared by Interdisciplinary Systems Ltd. for Environmental-Social Program, Northern Pipelines. Indian and Northern Affairs, Ottawa. Bradstreet, M.S.W. 1979. Thick-Billed Murres and Black Guillemots in the Barrow Strait Area, N.W.T., During Spring: Distribution and Habitat Use. Canadian Journal of Zoology, Volume 57: 1789-1802. . 1977. Feeding Ecology of Seabirds Along Fast-ice Edges in Wellington Channel and Resolute Passage, N.W.I. Prepared for Polar Gas Project by L.G.L. Ltd., Environmental Research Associates, Toronto, Ontario. Bradstreet, M.S.W. and K. Finley. 1977. <u>Distribution of Birds and Marine Mammals Along Fast-Ice Edges in Barrow Strait, N.W.T.</u> Prepared for Polar Gas Project by L.G.L. Ltd., Environmental Research Associates, Toronto, Ontario. Brown, R.G.B., D.N. Nettleship, P. Germain, C.E. Tull, and T. Davis. 1975.

<u>Atlas of Eastern Canadian Seabirds.</u> Canadian Wildlife Service, Ottawa. Buchanan, R.A. and W.E. Renaud. 1978. The Marine Ecology of Lancaster Sound and Adjacent Waters: An Annotated Bibliography. Environmental Studies 7. North of 60. Indian and Northern Affairs, Ottawa. Canadian Wildlife Service. 1972. <u>Arctic Ecology Map Series.</u> Prepared for Canadian Wildlife Service by Renewable Resources Consulting Services Ltd., Calgary, Alberta. 324 p. and 35 maps. . 1966. Canadian Wildlife Service Brief. In: <u>Proceedings Eirst International Scientific Meeting on Polar Bear</u>, University of Alaska, Fairbanks, 6-10 September 1965. U.S. Dept. of Interior, Bureau of Sport Fisheries and Wildlife (Resource Publication 16), and University of Alaska (International Conference Proceedings Series No. 1). pp. 9-15. Caron, A.W. 1974. Blackpoll Warbler on Cornwallis Island, Northwest Territories. <u>Canadian Field-Naturalist</u>, 88: 219. Davis, R.A., M.S.W. Bradstreet, C. Holdsworth, M. McLaren and W.J. Richardson. 1974. <u>Studies of Birds in the Central Canadian Arctic - 1974</u>. A preliminary report. Vol. I and II. Prepared for Polar Gas Project by L.G.L. Ltd., Toronto, Ontario. Davis, R.A. and K.J. Finley. 1979. Distributions, Migrations, Abundance and Stock Identity of Eastern Arctic White Whales. Manuscript, prepared for Meeting of the Subcommittee on Small Cetaceans, International Whaling Commission. June, 1979. Davis, R.A., K.J. Finley and W.J. Richardson. 1978. The Present Status and Future Management of Arctic Marine Mammals in Canada. Draft, prepared for Science Advisory Board of the Northwest Territories, Yellowknife by L.G.L. Ltd., Environmental Research Associates, Toronto, Ontario. Davis R.A., C. Holdsworth and W.J. Richardson. 1973. <u>Present Ornithological Knowledge and Suggested Research Programs for the Polar Gas Pipeline Project Vols.</u> 1 and 2. Prepared for Polar Gas Project by L.G.L. Ltd., Environmental Research Associates, Toronto, Ontario. 245 p. and map volume. Davis, R.A., W.J. Richardson, S.R. Johnson and W.E. Renaud. 1978. <u>Status of the Lancaster Sound Narwhal Population in 1976</u>. SC/29/Doc 22. Twenty-eight Report, International Whaling Commission. pp. 209-215. Dunbar, M.J. and D.M. Moore. 1978. Marine Life and its Environment in the Canadian Eastern Arctic: A Biogeographic Study. Unpublished report, Marine Sciences Centre, McGill University, Montreal, P.Q. Fenco Consultants Ltd. 1978. An Arctic Atlas: Background Information for Developing Marine Oilspill Countermeasures. Arctic Marine Oilspill Program Report EPS-9-EC-78-1. Fenco Consultants Ltd. and F.F. Slaney and Co. Ltd., Calgary. Fisheries and Environment Canada, Ottawa. F.F. Slaney and Co. 1975. Peary Caribou and Muskoxen and Panarctic's Seismic Operations on Bathurst Island, N.W.T. 1974. Prepared for Panarctic Oils Ltd., Calgary, Alberta, by F.F. Slaney and Company Ltd., Vancouver, British . 1974. Preliminary Environmental Impact Assessment of the Proposed Lancaster Sound Offshore Drilling Operations. Unpublished report, prepared for Norlands Petroleum Ltd., By F.F. Slaney and Co. Ltd. Finley, K.J. 1979. Haul-Out Behaviour and Densities of Ringed Seals (Phoca Hispida) in the Barrow Strait Area, N.W.T. Can. J. Zool. 57(10):1985-1997. . 1978. Behaviour and Densities of Ringed Seals (Phoca Hispidal During Haul Out in the High Arctic, June 1977. Prepared for Polar Gas Project by L.G.L. Ltd., Environmental Research Associates, Toronto, Ontario. . 1976. Studies of the Status of Marine Mammals in the Central District of Franklin, N.W.T. June-August, 1975. Prepared for Polar Gas Project by L.G.L. Ltd., Environmental Research Associates, Toronto, Ontario. Finley, K.J., R.A. Davis and W.J. Richardson. 1974. Preliminary Studies of the Numbers and Distribution of Marine Mammals in the Central Canadian Arctic - 1974. A Preliminary Interim Report. Prepared by Polar Gas Project by L.G.L. Ltd., Environmental Research Associates, Toronto, Ontario. inley, K.J., and W.G. Johnston. 1977. <u>An Investigation of the Distribution of Marine Mammals in the Vicinity of Somerset Island with Emphasis on Bellot Strait. August-September 1976.</u> Prepared for Polar Gas Project by L.G.L. Ltd., Environmental Research Associates, Toronto, Ontario. Fischer, C.A., and E.A. Duncan. 1976. <u>Ecological Studies of Caribou and Muskoxen in the Arctic Archipelago and Northern Keewatin</u>. Prepared by Renewable Resources Consulting Services Ltd. for Polar Gas Environmental Program. Ford, J.K.B. and H.D. Fisher. 1978. Underwater Acoustic Signals of the Narwhal (Monodon Monoceros). Can. J. Zool. 56(4):552-560. Freeman, M.M.R. (ed). 1976. <u>Inuit Land Use and Occupancy Project.</u> 3 Vols. Volume One: <u>Land use and occupancy</u>, Volume Two: <u>Supporting studies</u>, Volume Three: <u>Land Use Atlas</u>, Prepared by Milton Freeman Res. Ltd. for Indian and Northern Affairs, Ottawa. 287 and 263 pp. and map volume.

Wildlife Resources (con't) . 1975. Assessing Movement in an Arctic Caribou Population.

<u>J. Fnviron. Manage.</u> 3:251-257. . 1970. Productivity Studies on High Arctic Muskoxen. <u>Arctic Circular XX(3):58-65.</u> Gaele, J. 1971. Birds of Resolute, Cornwallis Island, N.W.T. <u>Canadian</u> <u>Field-Naturalist</u> 85:53-59. Godfrey, W.E. 1966. The Birds of Canada. Nat. Mus. Canada Bulletin No. 203. Government of Canada. 1966. <u>Atlas of the Northwest Territories. Canada.</u> Advisory Committee on the Development of Government in the Northwest Territories, Ottawa. Vol. 1 (text) and Vol. 2 (atlas). Green, J.M. and D.H. Steele. 1975. Observations on Marine Life Beneath Sea Ice, Resolute Bay, N.W.T. In: <u>Proceedings Circumpolar Conference on Northern Ecology</u>. September 15-18, 1975. National Research Council of Canada, Ottawa. pp. II- 77-86. Harington, C.R. 1968. <u>Denning Habits of the Polar Bear (Ursus Maritimus Phipps)</u>. Report Series No. 5, Canadian Wildlife Service, Ottawa. . 1966. Extralimital Occurences of Walruses in the Canadian Arctic. Journal of Mammalogy, 47:506-513. . 1964. Polar Bears and their Present Status. <u>Canadian Audubon Magazine</u> 26(1):3-10. . 1963. Polar Bear Study - Resolute Bay Area, Northwest Territories, 1962. Unpublished report, Canadian Wildife Service, Ottawa. 1961. Some Data on the Polar Bear and its Utilization in the Canadian Arctic. Canadian Wildlife Service, Ottawa. Unpublished report. Harington, Richard. 1961. <u>History, Distribution and Ecology of the Muskoxen.</u>
M.Sc. Thesis. McGill University, Dept. of Geography, Montreal. 489 p. and Hay, K. 1979. Population Biology of the Narwhal (<u>Monodon Monoceros</u> L.) in the Eastern Canadian Arctic. Ph.D. Thesis (in prep.), McGill University, Montreal. Hay, K. and R. McClung. 1976. Observations of Beluga and Narwhal in the Canadian High Arctic, Summer 1974. Fisheries Research Board of Canada, Manuscript Report Series No. 1385. Hay, K. and D.E. Sergeant. 1976. Interim Technical Report, Arctic Whale Project. Environmental-Social Program, Northern Pipelines, Manuscript. Heyland, J.D. 1975. Aspects of the Biology of Beluga (<u>Delphinapterus Leucas Pallas)</u> Interpreted from Vertical Aerial Photographs. In: <u>Proceedings. Second Canadian Symposium on Remote Sensing</u>, University of Guelph, Guelph, Ontario. April 29-May 1, 1974. pp. 373-390. Hildebrand, H. 1948. <u>Marine Fish of Arctic Canada</u>. M.Sc. Thesis, McGill University, Montreal. Holeton, G.F. 1974. Metabolic Cold Adaptation of Polar Fish: Fact or Artefact? <u>Physiol. Zool.</u> 47(3):137-152. Holloway, C.W. 1970. Threatened Vertebrates in Northern Circumpolar Regions.
In: W.A. Fuller and P.G. Kewan, (eds)., <u>Proceedings of the conference on productivity and conservaton in northern circumpolar lands</u>, <u>Edmonton</u>, I.U.C.N. Publication New Series No. 16, Morges, Switzerland. pp. 175-192. Hone, E. 1934. <u>The Present Status of the Muskox.</u> American Committee for International Wildlife Protection, Washington. Special Publicaton No. 5. Jonkel. C.J., G.B. Kolenosky, R.J. Robertson and R.H. Russell. 1971. Further Notes on Polar Bear Denning Habits. In: S. Herrero, (ed)., <u>Bears - their biology and management</u>. International Union for the Conservation of Nature and Natural Resources, Morges, Switzerland. Publication New Series No. 23. pp. 142-158. Kiliaan, H.P.L. and I. Stirling. 1978. Observations on Overwintering Walruses in the Eastern Canadian High Arctic. <u>Journal of Mammalogy</u> 59(1):197-200. Lalli, C.M., R. Buchanan, D. Thomson and F. Wells Jr. 1973. Polar Gas Preliminary Environmental Study: Marine Ecology Report. Unpublished report, Marine Sciences Centre, McGill University, Montreal. Lange, K.I. 1959. Biological Observations and General Comments on Cornwallis Island, N.W.T. <u>J. Ariz. Acad. Sci.</u> 1:72-75. Lent, P.C. 1971. Muskox Management Controversies in North America.

<u>Biological Conservation</u> 3:255-263. Loughrey, A.G. 1956. The Polar Bear and Its Protection. $\underline{0ryx}$ 3(5):233-239. Macpherson, A.H. 1969. <u>The Dynamics of Canadian Arctic Fox Populations.</u> Canadian Wildlife Service, Report Series No. 8. . 1959. A Preliminary Survey of Arctic Wildlife Resources.

Unpublished report, Canadian Wildlife Service, Edmonton, Alberta. Manning, T.H. 1969. <u>Geographical Variation in the Polar Bear (Ursus Maritimus Phipps</u>). Report Series No. 13, Canadian Wildilfe Service, Ottawa. Mansfield, A.W. 1975. Marine Ecology in Arctic Canada. In: <u>Proceedings</u> <u>Circumpolar Conference on Northern Ecology</u>, September 15-18, 1975, Ottawa. National Research Council of Canada. pp. II - 27-47. . 1971. Occurrence of the Bowhead or Greenland Right Whale (<u>Balaena Mysticetus</u>) in Canadian Arctic Waters. <u>J. Fish. Res. Board Can.</u> 28(12):1873-1875. . 1970. Population Dynamics and Exploitation of Some Arctic Seals. In: M.W. Holdgate (ed)., <u>Antarctic Ecology</u>, <u>Vol. I</u>, Academic Press, London and New York. pp. 429-446. . 1966. The Walrus in Canada's Arctic. <u>Can. Geog. J.</u> 72(3): McLaren, I.A. 1958. <u>The Economics of Seals in the Eastern Canadian Arctic.</u> Circular No. 1, Fisheries Research Board of Canada. Milne, A.R. 1974. Use of Artificial Subice Air Pockets by Wild Ringed Seals (Phoca Hispida). Gan. J. 7001. 52:1092-1093. Milne, A.R. and B.D. Smiley. 1978. Offshore Drilling in Lancaster Sound:

Possible Environmental Hazards, Institute of Ocean Sciences, Patricia Bay,
Dept. of Fisheries and Environment, Sidney, B.C. Mitchell, A.D., M. McLaughlin and A. Filion. 1979. Migration of Bowhead Whale (<u>Balaena Mysticetus</u>) in Eastern Canadian Arctic Waters. In: Abstracts Third <u>Biennial Conference of Biology of Marine Mammals</u>, October 7-11, 1979, Seattle, Washington. Nettleship, D.N. 1977. <u>Studies of Seabirds at Prince Leopold Island and Vicinity, Northwest Territories</u>, Preliminary Report of the Biological Investigations in 1975. Canadian Wildlife Service Progress Notes No. 73. 4(4):62-64. 1973. Canadian Seabird Research. Marine Pollution Bulletin . 1972. Inter-relationships of Seabirds and the Coastal Zone.

A Summary Report on Seabird Research. In: Coastal Zone, Proceedings of a
Seminar at the Bedford Institute of Oceanography. Dartmouth, Nova Scotia.
Water Management Service, Dept. of the Environment, Ottawa. Volume I.
Selected Background Papers, pp. 133-136. Nettleship, D.N., T.R. Binkhead and A.J. Gaston. 1979. <u>Reproductive Failurs Among Arctic Seabirds Associated with Unusual Conditions in Lancaster Sound 1978.</u> Studies on Northern Seabirds, Report 77, Canadian Wildlife Service, Ottawa Nettleship, D.N. and A.J. Gaston. 1978. <u>Patterns of Pelagic Distribution of Seabirds in Western Lancaster Sound and Barrow Strait, Northwest Territories, in August and September, 1976. AIPP Preliminary Report 1977. ESCOM No. AI-09. Preparedby Canadian Wildlife Service, Fisheries and Environment Canada, for Environmental-Social Program, Northern Pipelines, Indian and Northern Affairs, Ottawa.</u> . 1978. Patterns of Pelagic Distribution of Seabirds in Western Lancaster Sound and Barrow Strait, Northwest Territories, in August and September 1976. Occasional Paper No. 39. Canadian Wildife Service, Rections Institute of Oceanography, Dartmouth, Nova Scotia. Nettleship, D.N., and P.A. Smith, (eds). 1975. <u>Ecological Sites in Northern Canada</u>. Canadian Committee for the International Biological Programme, Conservation Terrestrial - Panel 9. Canadian Wildlife Service, Ottawa. Palmer, R.S. 1976. <u>Handbook of North American Birds.</u> Vols. 2 and 3. Yale Univ. Press, New Haven, Conn. Peterson, E.B. 1978. <u>Possible Environmental Disruptions from an Arctic Islands Gas Pipeline</u>. AIPP Preliminary Report 1977. ESCOM Rept. No. AI-10. Prepared by Western Ecological Services Ltd. for Environmental-Social Program, Northern Pipelines. Indian and Northern Affairs, Ottawa. Petersen, N.M. 1974-1978. <u>Ecology of the Canadian Arctic Archipelago: Selected References.</u> Vol. 1 (1974), 425 pp.; Vol. 2 (1974), pp. 426-846; Vol 3 (1975) pp. 847-1304; Vol. 4 (1976), pp. 1305-1790; and Vol. 5 (1978), pp. 1791-2277. Dept. of Indian and Northern Affairs, Ottawa. Petersen, R.L. 1966. <u>The Mammals of Eastern Canada</u>. Oxford University Press, Toronto, Ontario. Polar Gas. 1977? <u>Public Interest Part A Environmental Statement.</u> Chapter 5 Environmental Description. Volume 5, Book 2 of 3. Read, C.J. and S.E. Stephansson. 1976. <u>Distribution and Migration Routes of Marine Mammals in the Central Arctic Region.</u> Technical Report No. 667, Fisheries and Marine Service, Dept. of Environment.

Reeves, R. 1978. <u>Atlantic Walrus (Odobenus Rosmarus Rosmarus)</u>: <u>A Literature Survey and Status Report.</u> Research Report 10, Fish and Wildlife Service, U.S. Dept. of Interior.

Wildlife Resources (con't) . 1976. Narwhals: Another Endangered Species. Can. Geog. J. 92(3):12-19. _____. 1976. What Fate for the Narwhal? North/Nord 23(3):16-21. Renewable Resources Consulting Services Ltd. 1975. A Study of Land Mammals in the High Arctic 1974. A supplement completing the interim report, prepared for Polar Gas Project by Renewable Resources Consulting Services Ltd., Edmonton, Alberta. . 1974. A Study of Land Mammals in the High Arctic 1974. A preliminary interim report, prepared for Polar Gas Project by Renewable Resources Consulting Services Ltd., Edmonton, Alberta. . 1973. <u>Preliminary Land Mammal Study.</u> Prepared for Montreal Engineering Company Ltd., Polar Gas Study Group, Environmental Studies, by Renewable Resources Consulting Services Ltd., Edmonton, Alberta. 123 p. and maps. Schweinsburg, R.E., I. Stirling, S. Oosenburg, and H. Kiliaan. 1977. A Status <u>Report on Polar Bear Studies in Lancaster Sound.</u> December 1977. Prepared by Northwest Territories Fish and Wildlife Service, for Norlands Petroleum Ltd. Sefton, J. and G. Miller. 1978. <u>The Arctic Islands Pipeline Route: A Bibliography of Unpublished Fisheries and Environment Canada Reports.</u> AIPP Preliminary Report 1977. ESCOM Report No. Al-12. Environmental-Social Program, Northern Pipelines. Indian and Northern Affairs, Ottawa. sekerak, A.D., D. Thomson, H. Bain and J. Acreman. 1976. <u>Summer Surveys of</u> the Marine Ecology of Creswell Bay, Somerset Island and Assistance Bay, Connwallis Island, N.M.T. 1975. Prepared for Polar Gas Project by L.G.L. Ltd., Environmental Research Associates, Toronto, Ontario. Sekerak, A.D. and W.J. Richardson. 1978. <u>Studies of the Ecology of the Fast-Ice Edges of the High Arctic.</u> Prepared for Polar Gas Project by L.G.L. Ltd., Environmental Research Associates, Toronto, Ontario. Sergeant, D.E. 1973. Feeding, Growth, and Productivity of Northwest Atlantic Harp Seals (Phagophilus Groenlandicus). Fish. Res. Board Can. 30(1):17-29. . 1965. Migrations of Harp Seals <u>Pagophilus Groenlandicus</u>
(Erxleben) in the Northwest Atlantic. <u>J. Fish. Res. Board Can.</u> 22(2):433-464. Sergeant, D.E. and P.F. Brodie. 1975. Identity, Abundance, and Present Status of Populations of White Whales <u>Delphinapterus Leucas</u>, in North America. J. <u>Fish. Res. Board Can.</u> 32(7):1047-1054. Sergeant, D.E. and K. Hay. 1979. <u>Migratory Sea Mammals Populations in Lancaster Sound.</u> AIPP Report 1978. ESCOM Report No. AI-21. Environmental-Social Program, Northern Pipelines. Indian and Northern Affairs, Ottawa. Smith, T.G., B. Beck and J. Memogana. 1978. <u>Ringed Seal Breeding Habitat.</u>
<u>Surveys in Viscount Melville Sound, Barrow Strait and Peel Sound Areas.</u> AIP
Preliminary Report 1977. ESCOM Report No. Al-14. Environmental-Social
Program, Northern Pipelines. Indian and Northern Affairs, Ottawa. Smith, T.G., K. Hay, D. Taylor and R. Greendale. 1979. <u>Ringed Seal Breeding</u>
<u>Habitat in Viscount Melville Sound, Barrow Strait and Peel Sound.</u> AIPP
Report 1978. ESCOM Report No. AI-22. Environmental-Social Program, Northern
Pipelines. Indian and Northern Affairs, Ottawa. Smith, T.G. and D. Taylor. 1977. <u>Notes on Marine Mammals, Fox and Polar Bear Harvests in the Northwest Territories 1940 to 1972.</u> Technical Report No. 694, Fisheries and Marine Service, Dept. of Fisheries and Environment. Smith T.G., D. Taylor and Hahgagiak. 1976. Breeding Habitat and Population Surveys of Seals in Viscount Melville Sound, Barrow Strait and Peel Sound Areas. Interim report to the Arctic Islands Pipeline Program. Snyder, L.L. 1957. <u>Arctic Birds of Canada.</u> University of Toronto Press, Toronto. Stepney, P.H.R. and R.L. Wooley (no date - 1976?). Survey of Marine Mammals of Lancaster Sound, October 1975. Unpublished report, prepared for Norlands Petroleums Ltd. by Renewable Resources Consulting Services Ltd. Stirling, I. 1980. The Biological Importance of Polynyas in the Canadian Arctic. Arctic, Vol. 33, No. 2:303-315. Stirling, I. and P.B. Latour. 1978. Comparative Hunting Abilities of Polar Bear Cubs of Different Ages. <u>Can. J. Zool.</u> 56(8):1768-1772. Stirling, I., R.E. Schweinsburg, W. Calvert, and H. Kiliaan. 1979. Population Ecology of the Polar Bear Along the Proposed Arctic Islands Gas Pipeline Route. AIPP Report 1978. ESCOM Report Al-24. Environmental- Social Program, Northern Pipelines. Indian and Northern Affairs, Ottawa. . 1978. <u>Population Ecology of the Polar Bear Along the Proposed Arctic Islands Gas Pipeline Route</u>. AIPP Preliminary Report 1977. ESCOM Report No. Al-15. Environmental-Social Program, Northern Pipelines. Indian and Northern Affairs, Ottawa. . 1977. <u>Population Ecology of the Polar Bear Along the Proposed Arctic Islands Gas Pipeline Route.</u> Progress report to the Environmental Management Service, Dept. Environ., Edmonton, Alberta. Taunton, G.F. and R.W. Fenton. 1977. <u>Background Information on the Resource Harvesting Economy in the Polar Gas Study Region, Northwest Territories.</u>
1976. Prepared for Polar Gas Project by Inter-Group Consulting Economists Ltd., Winnipeg, Manitoba. Tener, J.S. 1965. <u>Muskoxen in Canada: A Biological and Taxonomic Review.</u>
Canadian Wildlife Service. Queen's Printers, Ottawa. . 1963. Queen Elizabeth Islands Game Survey, 1961. Canadian Wildlife Service, Ottawa. Occasional Papers No. 4. . 1958. The Distribution of Muskoxen in Canada. <u>J. Mammal.</u> Thomas, D.C., R.H. Russell, E. Broughton and P.L. Madore. 1975.

Investigations of Peary Caribou Populations on Some Canadian Arctic Islands,

March 1975. Canadian Wildlife Service Progress Notes No. 64. Thorsteinsson, R. 1958. <u>Cornwallis and Little Cornwallis, District of</u>
<u>Franklin, Northwest Territories.</u> <u>Geological Survey of Canada Memoir 294</u>. Tuck, L.M. 1972. Birds in the Arctic. Nature Canada 1(3):22-25. Furnbull, T.L. 1974. <u>Arctic III Expedition: Biological Report.</u> Vol. 4. James Allister MacInnis Foundation Arctic Diving Expeditions. Advisory Committee, Northern Development, North of 60. Department of Indian and Northern Affairs, Ottawa. Urban, E.K. 1957. Birds Observed at Resolute Bay, Cornwallis Island, Northwest Territories. The Passenger Pigeon. XIX: 73-75. Usher, P.J. 1975. Historical Statistics Approximating Fur, Fish and Game Harvests Within Inuit Lands of the N.W.T. and Yukon, 1915-1974, with Text. Nelson, J. (ed). Renewable Resources Project. Vol. 2 Inuit Tapirisat of Canada. Ottawa. 71 p. and tables.

Able, K.W. and D.E. McAllister. 1979. A revision of the snailfishes, genus Liparis, from Arctic Canada. Bull. Fish. Res. Canada. In press.

Bain, H. and A.D. Sekerak. 1978. Aspects of the biology of Arctic cod Boreogadus saida, in the central Canadian Arctic. Unpublished report by L.G.L. Ltd. for Polar Gas Project.

Bissett, D. 1967. Resolute, an area economic survey of the Lancaster Spund area, Vol. II, Department of Indian Affairs and Northern Development, AESR 57/1.

de March, L., B. de March and W. Eddy. 1977. Limnological, fisheries and stream zoobenthic studies of Stanwell-Fletcher Lake, Canada. Department of Indian and Northern Affairs-QS-B160-004-EE-Al. ESCOM Report Al-04.

da March, L., and W. Eddy. 1976. A greliminary investigation of aquatic habitats along the route of the proposed arctic islands pipeline. Unpublished Rept. by Department of the Environment for the Arctic Islands Pipeline Project.

Freeman, M. (ed). 1976. Inuit Land Use and Occupancy Project. Department of Indian and Northern Affairs, Ottawa. 3 Vols.

Green, J.M. and D.H. Steele. 1975. Observations on marine life beneath sea ice, Resolute Bay, N.W.T. Section II: Marine ecology. Proceed. Circumpolar Conference on Northern Ecology, Ottawa. pp. 77-86.

Holeton, G.F. 1974. Metabolic cold adaptation of polar fish: fact or artifact. Physiological Zoology 47:137-152.

Hunter, J.G. 1970. Production of Arctic char, Salvelinus alpinus (Linnaeus), in a small arctic lake, Fish. Res. Bd. of Canada Tech. Rep. 321: 1-190.

Johnson, L. 1980. The Arctic charr, Salvelinus alpinus, pp. 15-98. In E.K. Balon (ed). Charrs-Salmonid fishes of the genus Salvelinus. Not. 1 of Perspectives in vertebrate science. Dr. W. Junk Publishers, The Mague, The Netherlands.

1976. Ecology of Arctic populations of lake trout, Salvelinus namaycush, Lake whitefish Coregonus clupeaformis. Arctic charr, S. Alpinus, and associated species in unexploited lakes of the Canadian Northwest Territories. J. Fish. Res. Bd. Canada 31(11):2459-2488.

Lawrence, M., S. Davies, G. Collins,

Fish Resources (con't) Leim, A.H. and W.B. Scott. 1966. Fishes of the Atlantic coast of Canada. Fish Res. Bd. Can. Bull. 155:485. MacCallum, W. 1971. <u>Charr lake project annual report, 1970-71.</u>
Canadian Committee International Biological Programme. pp. 38-40. McAllister, D.E. pers. comm., Icthylology Unit, National Museum of Natural Sciences, Ottawa, Ontario. McPhail. J.D. 1961. A systematic study of the <u>Salvelinus alpinus</u> complex in North America. <u>J. Fish. Res. Bd. Canada</u> 18(5):793-816. Merkosak, S. Personal Comm., Pond Inlet, N.W.T. Milne, A.R. and B.D. Smiley. 1976. Offshore Drilling in Lancaster.
Sound possible environmental hazards. Inst. of Ocean. Sci.,
Department of Fisheries and Environment, Sidney, B.C. Moore, J.W. 1975. Reproductive biology of anadromous Arctic char, Salvelinus alpinus (L.), in the Cumberland Sound area of Baffin Island. J. Fish. Biol. 7:143-151. . 1975. Distribution, movements, and mortality of anadromous Arctic charr, <u>Salvelinus alpinus</u> L., in the Cumberland Sound area of Baffin Island. <u>J. Fish. Biol.</u> 7:339-348. Moore, J.W. and I.A. Moore. 1974. Food and growth of Arctic char, <u>Salvelinus alpinus</u> (L.), in the Cumberland Sound area of Baffin Island. <u>J. Fish. Biol.</u> 7:339-348 Nettleship, D.N. and A.J. Gaston. 1978. Patterns of pelagic distribution of seabirds in western Lancaster Sound and Barrow Strait, Northwest Territories, in August and September 1976. Can. Wildlife Serv. Occ. Paper. 39:1-40. Norlands Ltd. 1978. <u>Environmental impact statement for exploratory drilling in the Lancaster Sound region</u>. Rept. by Norlands Petroleum Ltd., Calgary. Robinson, K.E. and D.E. McAllister. (in prep.). Bibliography of the marine fishes of Arctic Canada 1771-1979. National Museum of Canada. 114 manuscript pages. Schindler, D.W., J. Kalff, H.E. Welch, G.J. Brunskill, H. Kling and N. Kritsch. 1974. Eutrophication in the high arctic - Meretta Lake, Cornwallis Island (75' N. lat.). J. Fish. Res. Bd. Can. 31:647-662. Scott, W.B., and E.J. Crossman. 1973. <u>Freshwater fishes of Canada.</u> Fish. Res. Bd. Canada Bull. 184. Sekerak, A.D., R.A. Buchanan, W.B. Griffiths and G. Foy. 1976. Biological oceanographic studies in Lancaster Sound, 1976. Unpublished Report by L.G.L. Ltd., to Norlands Petroleums Ltd. Sekarak, A.D., and F.F. Graves. 1975. <u>Investigation of aquatic resources along proposed Polar Gas Pipeline routes north of Spence Bay, N.W.T. 1974, Vol. 1 and 2. Aquatic Environments Limited, Crossfield, Alberta.</u> Sekarak. A.D., D. Thompson, H. Bain, and J. Acreman. 1976. <u>Summer surveys of</u> the marine ecology of Creswell Bay, Somerset Island and Assistance Bay, <u>Cornwallis Island, N.W.T. 1975</u>. Prepared for Polar Gas Project by L.G.L. Ltd., Environmental Research Associates, Toronto, Ontario. Templeman, W. 1963. <u>Distribution of sharks in the Canadian Atlantic (with special reference to Newfoundland waters)</u>. Bull. Fish. Res. Bd. Canada 140:1-77.

HISTORICAL INFORMATION

Bernier, J.E. 1910. <u>Report on the Dominion Government Expedition to the Arctic Islands and Hudson Strait on Board the C.G.S. Arctic in 1908-9.</u> Bissett, Don. 1967. <u>An Area Economic Survey.</u> Volume 1 Lancaster Sound Survey. Department of Indian Affairs and Northern Development. Ottawa Canadian Hydrographic Service. 1970. <u>Pilot of Arctic Canada Volume 1.</u> Second Edition. Marine Sciences Branch. Department of Energy Mines and Resources. . 1968. <u>Pilot Arctic of Canada. Volume II.</u> Marine Sciences Branch. Department of Energy Mines and Resources. Ottawa. Cooke, Alan, and Clive Holland. 1978. The Exploration of Northern Canada 500 to 1920, A Chronology. The Arctic History Press. Toronto. Dunbar, Moira, and Keith R. Greenaway. 1956. <u>Arctic Canada from the Air.</u> Canada Defense Research Board. Queen's Printer. Ottawa. McDougall, G.F. 1857. The Eventful Voyage of H.M. Discovery Ship Resolute to the Arctic Regions in Search of Sir John Franklin and the Missing Crews of H.M. Discovery Ships Erebus and Terror. 1852, 1853, 1854. Longmans, McLintock, Leopold. 1972. <u>A Narrative of the Discovery of the Fate of Sir</u> John Franklin and his Companions. Hurtig Publishers, Edmonton, Alberta. Mudge, Z.A. 1875. Arctic Heroes Facts and Incidents of Arctic Explorations. Hunt and Eaton. New York. National Map Collection. National Library and Public Archives. Ottawa. Neatby, Leslie, H. 1970. The Search for Franklin. Arthur Baker Limited. . McClure and the Northwest Passage. <u>The Beaver</u>. Winter. . 1958. <u>In Quest of the North West Passage.</u> Longmans, Green and Co., Toronto. Northern Affairs and National Resources. 1963. Information (Resolute). Northern Research Division. 1975. North of 60. <u>Abstracts of Publications of the Northern Research Division</u>, DIAND. Parry, W.E. 1821. <u>Journal of a Vovage for the Discovery of the Northwest</u>

Passage from the Atlantic to the Pacific: Performed in the Year 1819-20, in

his Majesty's Ships Hecla and Griper, Under the Orders of William Edward

Parry, With an appendix containing scientific and other observations. John

Murray, London. Phillips. R.A.J., 1967. <u>Canada's North.</u> 1967. MacMillan of Canada. Rand Corporation. 1963. <u>A Report of the Physical Environment of Northern Baffin Island and Adjacent Areas of Northwest Territories Canada.</u> Department of Geography, McGill University. Prepared for: United States Air Force Project Rand. Santa Monica. California. R.C.M.P. Commissioner's Reports. Historical Resources. 1979. Deputy Commissioner, Yellowknife. Sargent. Epes. (ed). 1857. Arctic Adventure by Sea and Land from the Earliest Date to the Last Expeditions in Search of John Franklin. Phillips, Sampson and Company. Boston. Thomson, George Malcolm. 1975. <u>The North-West Passage.</u> Secker and Warburg, London. Thoren, R. 1969. <u>Picture Atlas of the Arctic.</u> Elsevier Publishing Company. New York. Thorsteinsson, R. 1958. <u>Cornwallis and Little Cornwallis Islands, District of Franklin, Northwest Territories.</u> Memoir 294. Geological Survey of Canada. Department of Mines and Technical Surveys, Ottawa.

Verner, Coolie. 1972. <u>Cartographica Explorer's Maps of the Canadian Arctic 1818-1860</u>. Monograph No. 6. York University. Toronto.

coastal classification		
code	class and description	diagram(s)
Вс	CONTEMPORARY BEACH COMPLEX. High energy depositional environments, which are usually extensive. Spits, bars, lagoons, former beach ridges and storm beaches are common as are gravel forelands and raised beaches inland. Coarse sands and gravel are typical materials.	
Br	RAISED BEACH SEQUENCE. Sequences of beach ridges typically occurring on 5-10° slopes extending up to 2 km inland. Surface materials are gravel. Narrow contemporary beaches of low energy are ubiquitous. Wider beaches are classed as Bc .	
Ca	CLIFFS WITH NO TALUS. Precipitous rock slopes, that range from 65° slopes – to vertical – to often vertical, sometimes overhanging. The cliff face may include prominant rock ledges. The class has no beach and occurrence is very limited.	
Cb	CLIFFS WITH LESS THAN ONE-THIRD TALUS COVER. As class Ca, but with up to one-third of height covered by talus, free-fallen from the precipitous rock slope above. The talus itself may be of variable thickness, including only blankets or veneers on bedrock. Narrow (1-3 m) coarse gravel and boulder beaches are typical.	
Сс	CLIFFS WITH ONE-THIRD TO TWO-THIRDS TALUS COVER. As class Cb, with more talus.	JAN OT BOM JANS
Cd	CLIFFS WITH MORE THAN TWO-THIRDS TALUS. As class Cb, but mostly talus covered. As talus approaches complete cover, this class grades into class Hc.	
GI	GLACIER. Glacier ice which reaches the sea, and results in calving. Where the ice has retreated to leave a gravel plain, classes Ps or Pt take precedence. This class includes associated lateral moraines as bluffs of till with small gravel beaches. Classes Cb, Cc and Cd are normally found juxtaposed.	map unit
Нс	COLLUVIAL HILLSLOPES. Smooth, sloping colluvium, typically undergoing sheet wash or solifluction, extending to narrow gravel beaches. This class occurs mostly in sheltered waters — exposure to significant wave action would quickly erode these materials and create beach or foreland conditions. This class grades into class Cd with increasing slope and class Hr with reducing extent.	and to send native 2000 ASA solve GMCORD and the control of the co
Hr	ROCKY HILLS. Mainly rock slopes, over 5-10°, which extend from over 50 m elevation. Pockets of colluvium and raised beaches are common, either reaching the sea or perched on the backshores. Small fans occur throughout, and give rise to narrow gravel beaches extending along shore. Small sections of precipitous rock slopes may also be present. Islands are common offshore.	CHANGE STOLED TO AND A SCENIER OF CHANGE STOLED TO A SCENI
Pc	ROCKY PLAIN WITH LOW CLIFFS. These normally occur as low rock forelands in front of rocky hills or high cliffs with talus. These rock forelands range from 10's of metres to 1-2 km wide, and are typically several metres to 10's of metres high. Near vertical cliffs at the seaward end are common. Beaches of any kind are rare.	
Pm	MARINE PLAIN. Emergent marine deposits which are unmodified by wave action. Large tidal flats are common. This class appears to be very similar to Pt on air photos, and is distinguished by inference from inland terrain.	sometrus base tidal zone
Pr	ROCKY PLAIN. Rocky slopes of low elevation, are usually less than 50 metres, and of 5-10°. Colluvial pockets and fans occur occasionally, and narrow gravel beaches occur in their vicinity. This class grades into Hr with increasing elevations. Islands and reefs are common offshore.	
Ps	GRAVEL PLAIN AND SLOPING BACKSHORE. Forelands consist of unconsolidated sediments; usually fans, raised beaches or storm beach gravels. Gravel backshores have a slope of 5-10° and a narrow contemporary beach (except at storm beaches). This class grades into Br and Rf.	raised beach foreland storm beach foreland
Pt toam view	TILL PLAIN. Similar to Pm in outward appearances; and is inferred from presence of till plain inland. Comprised of gently sloping submerged plains, with no beach activity, and a typically wide tidal zone. Occurs in sheltered waters.	grittend by protection and a burning and a b
Rf	RIVER-MOUTH AND FLUVIAL COMPLEXES. Includes features associated with river-mouths; fans, deltas, estuaries, tidal flats, marshes, baymouth bars, spits, etc. Smaller fans grade into class Ps where isostatic rebound exceeds the streams debris supply, causing the fan to be raised and the stream to incise.	bars raised beaches

beaches

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