

This document was produced
by scanning the original publication.

Ce document est le produit d'une
numérisation par balayage
de la publication originale.

Bibliography of Halifax Harbour
and Bedford Basin

B.T. Hargrave and D.J. Lawrence
November 1988

Citations for studies in Bedford Basin, Halifax Harbour and approaches were compiled. The list includes physical, geological, chemical and biological investigations within the marine environments of Bedford Basin, Halifax Harbour and adjacent coastal waters. Many of titles do not specify these locations, but examination of the publications indicates that work was carried out in these areas. Hydrographic charts, geological and geophysical maps are also referenced. Studies related to impacts of sewage discharge have been included but engineering surveys concerning sewage treatment, surface water hydrology and runoff have been omitted.

BIBLIOGRAPHY FOR STUDIES IN HALIFAX HARBOUR AND BEDFORD BASIN

Addison, R.F. 1977. Diphenyl ether - another marine environmental contaminant. *Mar. Poll. Bull.* 8: 237-240.

Allen, R.G.H. 1963. Granitic rocks of the Halifax Harbour-St. Margaret's Bay area (Nova Scotia). M.Sc. Thesis, Dalhousie University, Halifax, N.S.

Angelidis, S.J. 1986. Aspects of the ecology and photosynthetic physiology of Ceratium longipes (Bailey) Gran, a large armoured dinoflagellate. Ph.D. Thesis, Dalhousie University, Halifax, N.S.

Applied Marine Research Ltd. 1976. A consideration of the ecological effects of sewage discharge into Halifax Inlet. Rept. for the Metropolitan Area Planning Commission, Ref. 76-40, October 1976.

ASA Consulting Ltd. 1985. The Halifax Inlet water quality study, Phase 1: data review. Rept. for the Metropolitan Area Planning Commission, January 1985.

ASA Consulting Ltd. 1986. The Halifax Inlet water quality study, Phase 2 Report, Vols. I and II. Rept. for the Metropolitan Area Planning Commission, August 1986.

Atherton, W.C. 1979. An annual study of the vertical migration patterns of zooplankton in Bedford Basin, Nova Scotia. M.Sc. Thesis, Dalhousie University, Halifax, N.S.

Banks, R.E. 1955. Seasonal changes in the water temperature of Halifax Harbour and Bedford Basin. Underwater Physics Section IV, Research Note 55/1. Naval Research Establishment, Dartmouth, N.S.

Beals, H.L. 1966. Manganese-iron concretions in Nova Scotia lakes. *Mar. Sediments* 2: 70-72.

Bedford Basin Pollution Committee 1970. Report of the Bedford Basin Pollution Committee of the Council of the Bedford Service Commission. Rept. sub. to Metropolitan Area Planning Commission, June 22, 1970.

Bishop, C.M. and P. Odense. 1967. The ultrastructure of the white striated myotomal muscle of the cod, Gadus morhua. *J. Fish. Res. Board Can.* 24: 2549-2555.

Boulding, E.G. and T. Platt. 1986. Variation in photosynthetic rates among individual cells of a marine dinoflagellate. *Mar. Ecol. Prog. Ser.* 29: 19-203.

Boyd, C.M. and A.E. Cok. 1963. Report on the North West Arm of Halifax Harbour, Halifax, Nova Scotia. Unpubl. Rept. Institute of Oceanography, Dalhousie Univ., Halifax, 23 p.

Brisco, C.D. 1974. Concentrations and distribution of oil pollutants in McNab's Cove, Halifax Harbour, Nova Scotia. Marit. Sediments 10: 67.

Canplan Consultants Ltd. 1975. Halifax Harbour bottom survey. Report prepared for the Nova Scotia Dept. of Development, Halifax, N.S. Geol. Survey Can. Open File No. 283, 112 p.

CBCL Ltd. 1987a. The Halifax Inlet Water Quality Study, Phase 3, report for the Metropolitan Area Planning Commission, April 1987.

CBCL Ltd. 1987b. Halifax Inlet regional pollution abatement system. Impact analysis of sewage treatment options for Herring Cove area. Report for the Metropolitan Area Planning Commission, November 1987.

Conover, R.J. 1978. Feeding interactions in the pelagic zone. Rapp. P.-v. Reun. Cons. int. Explor. Mer, 173: 66-76.

Conover, R.J. and P. Mayzaud. 1975. Respiration and nitrogen excretion of neretic zooplankton in relation to potential food supply, pp. 151-163. In G. Persoone and E. Jaspers (Eds.) Proc. 10th Eur. Symp. Mar. Biol. Ostend, Belgium, Universa Press, Wetteren. Vol. 2

Conover, R.J. and P. Mayzaud. 1984. Utilization of phytoplankton by zooplankton during the spring bloom in a Nova Scotia inlet. Can. J. Fish. Aq. Sci. 41: 232-244.

Conover, R.J. and S.A. Poulet. 1986. Physiological methods for determining copepod production. 2nd International Conference on Copepoda, Aug. 13-17, 1984, Ottawa. National Museums of Canada, Syllogeus No. 58, pp. 85-99.

Conover, S.A.M. 1975. Nitrogen utilization during spring blooms of marine phytoplankton in Bedford Basin, Nova Scotia, Canada. Mar. Biol. 32: 247-261.

Cota, G.F. and W.G. Harrison. 1983. Plankton dynamics in Bedford Basin, Nova Scotia: carbon flux in feeding experiments with micro- and macrozooplankton from February 13, 1978 to January 31, 1979. Data Rept. Dept. Fish. Oceans 392, 67 p.

Cote, B. and T. Platt. 1983. Day-to-day variations in the spring-summer photosynthetic parameters of coastal marine phytoplankton. Limnol. Oceanogr. 28: 320-344.

Cote, B. and T. Platt. 1984a. Utility of the light-saturation curve as an operational model for quantifying the effects of environmental conditions on phytoplankton photosynthesis. Mar. Ecol. Prog. Ser. 18: 57-66.

Cote, B. and T. Platt. 1984b. Daily phytoplankton productivity experiments and nutrient measurements in Bedford Basin, Nova Scotia, from 18 May to 26 July 1975. Can. Data Rept. Fish. Aquat. Sci. 425, 116p.

DeIure, A.M. 1983. The effect of storms on sediments in Halifax Inlet, Nova Scotia. M.Sc. Thesis, Dalhousie University, Halifax, N.S. 216 p.

de la Ronde, M.S. 1972. Temperature, salinity and density distributions of the Scotian Shelf 1965-1971. Bedford Institute of Oceanography Data Series BI-D-72-6.

Dobson, D. 1975. Temperature, salinity and density distributions of the Halifax Section. BIO Data Ser., BI-D-75-6.

Dobson, D. 1977. Temperature, salinity and density distributions of the Halifax Section. BIO Data Ser., BI-D-77-2.

Dobson, D. 1978. Temperature, salinity and density distributions of the Halifax Section. BIO Data Ser., BI-D-78-3.

Drinkwater, K., B. Petrie and W.H. Sutcliffe, Jr. 1979. Seasonal geostrophic volume transports along the Scotian Shelf. Est. Coastal Mar. Sci. 9: 17-27.

Drinkwater, K. and G. Taylor. 1982. Monthly mean temperature, salinity and density along the Halifax Section. Fish. Aq. Sci. Tech. Rept. 1093.

Duerden, F.C. 1973. Aspects of phytoplankton production and phosphate exchange in Bedford Basin, Nova Scotia. Ph.D. Thesis, Dalhousie University, Halifax, N.S.

Elner, R.W. and S.L. Hamet. 1984. The effects of ocean dumping of dredge spoils onto juvenile lobster-habitat: a field evaluation. Can. Tech. Rept. Fish. Aquat. Sci. 1247, 12 p.

Freeman, K. 1972. The spatial and seasonal distribution of coliforms in Bedford Basin. Fish. Res. Board Can. Tech. Rept. No. 352, 27 p.

Freeman, K.R. and L.M. Dickie. 1979. Growth and mortality of the blue mussel (Mytilus edulis) in relation to environmental indexing. J. Fish. Res. Board Can. 36: 1239-1249.

Gagnon, M.J. 1983. Monitoring anionic surfactants at a sea outfall, Halifax Harbour, Canada. Water Res. 17: 1653-1659.

Gershey, R.M. 1983a. Characterization of seawater organic matter carried by bubble-generated aerosols. Limnol. Oceanogr. 28: 309-319.

Gershey, R.M. 1983b. A bubble adsorption device for the isolation of surface-active organic matter in seawater. *Limnol. Oceanogr.* 28:395-400.

Gifford, D.J. 1980. The population biology and community ecology of the marine cladocera of Bedford Basin, Nova Scotia, with special reference to the feeding biology of Podon leuckarti G.O. Sars. M.Sc. Thesis, Dalhousie University, Halifax, N.S.

Gifford, D.J. 1985. The impact of grazing by marine planktonic oligotrichs (Ciliophora, Oligotrichida) in laboratory culture and in the Northwest Arm of Halifax Harbour. Ph. D. Thesis, Dalhousie University, Halifax, N.S.

Gifford, D.J. 1988. Impact of grazing by microzooplankton in the Northwest Arm of Halifax Harbour, Nova Scotia. *Mar. Ecol. Prog. Ser.* 47: 249-258.

Gordon, D.C., Jr., P.D. Keizer and J. Dale. 1978. Temporal variations and probable origins of hydrocarbons in the water column of Bedford Basin, Nova Scotia. *Est. Coast. Mar. Sci.* 7: 243-256.

Grant, A.C. 1967. A continuous seismic profile from Halifax Harbour, Nova Scotia. *Mar. Sediments* 3: 64.

Gregory, D. 1972. A physical oceanographic study of the Northwest Arm of Halifax Harbour. M.Sc. Thesis, Dalhousie University, Halifax, N.S.

Gregory, M.R. 1970. Distribution of benthonic foraminifera in Halifax Harbour, Nova Scotia. Ph.D. Thesis, Dalhousie University, Halifax, N.S., 135 pp.

Gregory, M.R. 1972. A shallow seismic profiling survey of Halifax Harbour, Nova Scotia. Nova Scotia Research Foundation Rept. 3-72.

Hallberg, R. 1983. Apparent microbial precipitation of calcium carbonate in seawater: importance of pH. *Environ. Biogeochem. Ecol. Bull.* 35:259-265.

Hargrave, B.T. 1974. Comparison of benthic invertebrate biomass and oxygen consumption by marine sediments. ICES Contribution C.M. 1974/E, 10 pp.

Hargrave, B.T. 1975a. The importance of total and mixed-layer depth in the supply of organic material to bottom communities. *Symp. Biol. Hung.* 15: 157-165.

Hargrave, B.T. 1975b. Stability in structure and function of the mud-water interface. *Verh. Internat. Verein. Limnol.* 19: 1073-1079.

Hargrave, B.T. 1978. Seasonal changes in oxygen uptake by settled particulate matter and sediments in a marine bay. J. Fish. Res. Board Can. 35: 1621-1628.

Hargrave, B.T. 1980. Factors affecting the flux of organic matter to sediments in a marine bay, pp. 243-263. In K. Tenore and B.C. Coull (Eds.) Benthic dynamics, Univ. S. Carolina Press.

Hargrave, B.T. and G.F. Connolly. 1978. A device to collect supernatant water for measurement of the flux of dissolved compounds across sediment surfaces. Limnol. Oceanogr. 23: 1005-1010.

Hargrave, B.T. and G.A. Phillips. 1975. Estimates of oil in aquatic sediments by fluorescence spectroscopy. Environ. Pollut. 8: 193-215.

Hargrave, B.T. and G.A. Phillips. 1977. Oxygen uptake of microbial communities on solid surfaces, pp. 545-587. In J. Cairns (Ed.) Aquatic Microbial Communities, Garland Publ., New York.

Hargrave, B.T. and G.A. Phillips. 1981. Annual in situ carbon dioxide and oxygen flux across a subtidal marine sediment. Est. Coastal Mar. Sci. 12: 725-737.

Hargrave, B.T. and S. Taguchi. 1978. Origin of deposited material sedimented in a marine bay. J. Fish. Res. Board Can. 35: 1604-1613.

Harrison, G. W. 1983. Uptake and recycling of soluble reactive phosphorus by marine microplankton. Mar. Ecol. Prog. Ser. 10: 127-135.

Harrison, G.W. and T. Platt. 1980. Variations in assimilation number of coastal marine phytoplankton: effects of environmental co-variates. J. Plankton Res. 24: 249-260.

Harrison, W.G., T. Platt and M.R. Lewis. 1987. F-ratio and its relationship to ambient nitrate concentration in coastal waters. J. Plankton Res. 9: 235-248.

Hollibaugh, J.T. 1976. Nitrogen regeneration during amino acid degradation and the activity of bacteria in plankton communities of Halifax Harbour, Nova Scotia, Canada. Ph.D. Thesis, Dalhousie University, Halifax, N.S.

Holm-Hansen, O. 1976. Difficulties with ATP measurements in inshore waters. Limnol. Oceanogr. 21: 145-149.

Honeyman, D. 1886. Additional notes of glacial action in Halifax Harbour, Northwest Arm, and Bedford Basin. Nova Scotia Inst. Sci. 6: 251-260.

Hurlbut, S., S. Davidson, K. Lank and S. Marquis. 1987. Environmental implications of sewage treatment options in Halifax Inlet. Appendix D in Halifax Inlet Study, Phase III, ASA Consulting Ltd., Report for Metropolitan Area Planning Commission, May 1987.

Irwin, B. C. Caverhill, J. Anning, D. Mossman and T. Platt. 1988. Carbon and oxygen primary production in Bedford Basin, Nova Scotia from March to June 1985. Can. Data Rept. Fish. Aquat. Sci. 686, 135 p.

Irwin, B., W.G. Harrison and T. Platt. 1983. Plankton dynamics in Bedford Basin, Nova Scotia: phytoplankton productivity experiments and nutrient measurements from February 13, 1978 to March 14, 1979. Can. Data Rept. Fish. Aq. Sci. 272, 175 p.

Irwin, B. and T. Platt. 1978. Phytoplankton productivity experiments and nutrient measurements in Bedford Basin, Nova Scotia, from Sept. 1975 to Dec. 1976. Fish. Mar. Ser. Tech. Rept. No. 762, 128 p.

Irwin, B., T. Platt, A.D. Jassby and D.V. Subba Rao. 1975. The relationship between light intensity and photosynthesis by phytoplankton. Results of experiments at three stations in the coastal waters of Nova Scotia. Fish. Mar. Ser. Tech. Rept. No. 595, 205 p.

Jassby, A.D. and T. Platt. 1976. Mathematical formulation of the relationship between photosynthesis and light for phytoplankton. Limnol. Oceanogr. 21: 540-5476.

Jordan F. 1972. Oceanographic data of Halifax Inlet. BIO Data ser., BI-D-72-8.

Keizer, P.D., D.C. Gordon, Jr. and J. Dale. 1977. Hydrocarbons in eastern Canadian marine waters determined by fluorescence spectroscopy and gas-liquid chromatography. J. Fish. Res. Board Can. 34: 347-353.

Kepkay, P.E. 1977. Preliminary investigation of free gas as the control of sub-bottom acoustic reflection in the fine-grained sediments of Halifax Harbour and St. Margaret's Bay, Nova Scotia. M.Sc. Thesis, Dalhousie University, Halifax, N.s. 86 p.

Kepkay, P.E., R.C. Cooke and D.J. Barrett. 1980. The acoustic signature of gas-bearing sediments in two coastal inlets of Atlantic Canada. Proc. N.S. Inst. Sci. 30:1-9.

Kepkay, P.E. and J.A. Novitsky. 1980. Microbial control of organic carbon in marine sediments: coupled chemoautotrophy and heterotrophy. Mar. Biol. 55: 261-266.

Krauel, D.P. 1969. Bedford Basin data report - 1967. Fish. Mar. Ser. Tech. Rept. No. 120, 84 p.

- Lauzier, L.M. and J.H. Hull. 1969. Coastal station data temperatures along the Canadian Atlantic coast. Fish. Res. Board Can Tech. Rept. 150.
- LaRoche, J. 1983. Ammonium regeneration: its contribution to phytoplankton nitrogen requirements in a eutrophic environment. Mar. Biol. 75: 231-240.
- Lehman, P.W. 1981. Comparison of chlorophyll a and carotenoid pigments as predictors of phytoplankton biomass. Mar. Biol. 65: 237-244.
- Lewis, M.R. 1984. Biological oceanographic aspects of sewage addition to Halifax Inlet. Appendix E in ASA Consulting Ltd., Halifax Inlet Water Quality Study, Phase I, Metropolitan Area Planning Commission, January 1985.
- Lewis, M.R. and T. Platt. 1982. Scales of variability in the estuarine ecosystem, p. 3-20. In V. Kennedy (Ed.), Estuarine Comparisons, Academic Press.
- Lewis, M.R., E.P.W. Horne, J.J. Cullen, N.S. Oakey and T. Platt. 1984. Turbulent motions may control phytoplankton photosynthesis in the upper ocean. Nature 311: 49-50.
- MacCaull, W.A. and T. Platt. 1977. Diel variations in the photosynthetic parameters of coastal marine phytoplankton. Limnol. Oceanogr. 22: 723-731.
- MacLean, S.A., C.M. Morrison, R.A. Murchelano, S. Everline and J.J. Evans. 1987. Cysts of unknown etiology in marine fishes of the Northwest Atlantic and Gulf of Mexico. Can. J. Zool. 65: 296-303.
- MacPherson, J.D. 1960. Anisotropy of the rock in the approaches to Halifax Harbour, Nova Scotia. Seismol. Soc. America Bull. 50:575-579.
- Marra, J. 1978. Phytoplankton photosynthetic response to vertical movement in a mixed layer. Mar. Biol. 46: 203-208.
- Mayzaud, P. and R.J. Conover. 1984. Distribution of digestive enzymes in zooplankton during the spring bloom in a Nova Scotia inlet. Can. J. Fish. Aqu. Sci. 41: 245-252.
- Mayzaud, P. and S. Taguchi. 1979. Spectral and biochemical characteristics of the particulate matter in Bedford Basin. J. Fish. Res. Board Can. 36: 211-218.
- Mayzaud, P., S. Taguchi and P. Laval. 1984. Seasonal pattern of seston characteristics in Bedford Basin, Nova Scotia, relative to zooplankton feeding: a multivariate approach. Limnol. Oceanogr. 29: 745-762.

~~McClelland, G., R.K. Misra and D.J. Marcogliese. 1983. Variations in abundance of larval anisakines, sealworm (Phocanema decipiens) and related species in Scotian Shelf (4Vs and 4W) cod and flatfish. Can. Tech. Rept. Fish. Aquat. Sci. 1202, 27 p.~~

McClelland, G., R.K. Misra and D.J. Martell. 1987. Temporal and geographical variations in abundance of larval sealworm, Pseudoterranova (Phocanema) decipiens in the fillets of American plaice (Hippoglossoides platessoides) in eastern Canada: 1985-86 surveys. Can. Tech. Rept. Fish. Aquat. Sci. 1513, 15 p.

McGonigal, D., R. Loucks and D. Ingraham. 1974. Halifax Narrows: sample current meter data, 1970-1971. BIO Data Ser., BI-D-74-5.

McKnight, S. 1985. Review of water quality data for Halifax Harbour. Appendix D in ASA Consulting Ltd., Halifax Inlet Water Quality Study, Phase I, Metropolitan Area Planning Commission, January 1985.

Measures, C.I. and J. J. Wrench. 1982. Planktonic cycling of selenium in a coastal ecosystem. AGU/ASLO Meeting Abstracts, EOS, Trans. Am. Geophys. Union 63: 71.

Menon, A.S. 1977. Evaluation of A-1 medium for the rapid recovery of fecal coliforms from marine waters. Tech. Dev. Rept. EPS-AR-77-10, Environmental Service Branch, Environmental Protection Service, Atlantic Region.

Michalik, P.A. and D.C. Gordon, Jr. 1971. Concentration and distribution of oil pollutants in Halifax Harbour, 10 June to 20 August, 1971. Fish. Res. Board Can. Tech. Rept. No. 284.

Miller, A.A.L., P. J. Mudie and D.B. Scott. 1982. Holocene history of Bedford Basin, Nova Scotia: foraminifera. Can. J. Earth Sci. 19: 2342-2367.

Moore, D.S. and R.J. Miller. 1983. Recovery of macroalgae following widespread sea urchin mortality with a description of nearshore hard-bottom habitat on the Atlantic coast of Nova Scotia. Tech. Rept. Fish. Aquat. Sci. 2030, 94 p.

Moore, D.S., R.J. Miller and L.D. Meade. 1986. Survey of shallow benthic habitat: Eastern shore and Cape Breton, Nova Scotia. Can. Tech. Rept. Fish. Aquat. Sci. 1546, 54 p.

Moran, S.B. and R.M. Moore. 1988. Temporal variations in dissolved and particulate Al during field and mesocosm plankton blooms. AGU 1988 Ocean Sciences Meeting, EOS, Trans. Am. Geophys. Union 68:1762.

Morrison, C.M. 1983. The distribution of the microsporidian Loma morhua in tissues of the cod Gadus morhua L. Can. J. Zool. 61: 2155-2161.

- Morrison, C.M. 1987. Histology of the Atlantic cod, *Gadus morhua*: an atlas. Can. Spec. Publ. Fish. Aquat. Sci. 98. Ottawa.
- Morrison, C.M., R.G. Appy, G. Shum, C. Annand and P. Odense. 1979. Histology and the incidence of pseudobranch tumors in Atlantic cod (*Gadus morhus*) in Halifax Harbour. Int. Council Expl. Sea, CM/1979/E:31.
- Morrison, C.M., J.W. Cornick, G. Sahum and B. Zwicker. 1984. Histopathology of atypical *Aeromonas salmonicida* infection in Atlantic cod, *Gadus morhua* L. J. Fish Diseases 7: 477-494.
- Morrison, C.M. and W.E. Hawkins. 1984. Coccidians in the liver and testis of the herring *Culpea harenqus* L. Can. J. Zool. 62: 480-493.
- Morrison, C.M. and V. Marryatt. 1986. Further observations on *Loma morhua* Morrison & Sprague, 1981. J. Fish Diseases 9: 63-67.
- Morrison, C.M., V. Marryatt and B. Gray. 1984. Structure of *Pleistophora hippoglossoides bosanquet* in the American plaice *Hippoglossoides platessoides* (Fabricius). J. Parasit. 70: 412-421.
- Morrison, C.M., G. McClelland, J. Cornick and D. Marcogliese. 1986. Parasites and diseases of some marine finfish off Nova Scotia. Can. Tech. Rept. Fish. Aquat. Sci. 1424, 36 p.
- Morrison, C.M. and P. Odense. 1978. Distribution and morphology of the rodlet cell in fish. J. Fish. Res. Board Can. 35: 101-116.
- Morrison, C.M. and G. Shum. 1983. Epitheliocystis in American plaice, *Hippoglossoides platessoides* (Fabricius). J. Fish Diseases 6: 303-308.
- Morrison, C.M. and V. Sprague. 1981. Electron microscopical study of a new genus and species of microsporidia in the gills of Atlantic cod *Gadus morhua* L. J. Fish Diseases 4: 15-32.
- Morrison, C.M. and V. Sprague. 1983. Microsporidia in the gills of cod *Gadus morhua* L., haddock *Melanogrammus aeglefinus* (L), and brook trout *Salvelinus fontinalis*, Mitchill. Int. Council Expl. Sea Spec. Meeting on Diseases of Commercially Important Marine Fish and Shellfish: No. 20
- Morrison, C.M., V. Sprague, G.L. Hoffman, V. Marryatt and B. Gray. 1984. Ultrastructure studies on fish microsporidians, P. 698. In G.W. Bailey (Ed.) Proc. 42nd Ann. Meeting Electron Microscop. Soc., San Francisco Press, Inc.
- Neu, H. 1968. Waves in Halifax Harbour. BIO Report Ser., AOL Rept. 68-3.
- Neu, H.J.A. 1971. Review of the layout of the Container Pier in Halifax Harbour. BIO Report Ser., AOL Rept. 71-1.

~~Nova Scotia Department of the Environment and Metropolitan Area~~
Planning Commission. 1986. Report of the Halifax Harbour
Monitoring
Program. R.S. Giffen (Ed.), 463 p.

Novitsky, J.A. 1983a. Apparent microbial precipitation of calcium carbonate in seawater: importance of pH, pp. 259-265. In R Hallberg (Ed.) Environmental Biogeochemistry.

Novitsky, J.A. 1983b. Microbial activity at the sediment-water interface in Halifax Harbour, Canada. Appl. Environ. Microbiol. 45: 1761-1766.

Novitsky, J.A. 1983c. Heterotrophic activity throughout a vertical profile of seawater and sediment in Halifax Harbour, Canada. Appl. Environ. Microbiol. 45: 1753-1760.

Novitsky, J.A. 1987. Microbial growth rates and biomass production in a marine sediment: evidence for a very active but mostly nongrowing community. Appl. Environ. Microbiol. 53:2368-2372.

OceanChem Group. 1986. Environmental data on Atlantic Harbours. Rept. TP8351E, Vols. 1 and 2. Waterways Development, Canadian Coast Guard, Transport Canada, Ottawa.

OceanChem Group. 1988. Halifax Harbour sediment quality study. Phase 1: sample collection. Report to: Ocean Dumping and Marine Program, Environment Canada, 26 p.

Odense, R., O.P. Kamra and J. Vandermeulen. 1984. Measurement of mutagenic potential in extracts of Mytilus edulis collected from polluted harbours using Ames test. Genetics 107:79.

Paranjape, M.A. 1980. Occurrence and significance of resting cysts in a hyaline tintinnid, Helicostomella subulata (Ehre.) Jorgensen. J. Exp. Mar. Biol. Ecol. 48: 23-33.

Parrish, C.C. 1987. Time series of particulate and dissolved lipid classes during spring phytoplankton blooms in Bedford Basin, a marine inlet. Mar. Ecol. Prog. Ser. 35:129-139.

Parrish, C.C., P.J. Wangersky, R.P. Delmas and R.G. Ackman. 1988. Iatroscan-measured profiles of dissolved and particulate marine lipid classes over the Scotian Slope and in Bedford Basin. Mar. Chem. 23: 1-15.

Pearre, S. 1981. Feeding by Chaetognatha: energy balance and importance of various components of the diet of Sagitta elegans. Mar. Ecol. Prog. Ser. 5: 45-55.

Petrie, B. 1980. Physical characteristics of the marine ecosystem: an Atlantic east coast example. Contribution to Offshore Environment in the 80s, St. John's, Newfoundland, December 1980.

Petrie, B. 1981. Overview of processes and features of the physical oceanography of the Scotian Shelf. Working Paper 81/199 in Workshop of the Marine Environment and Ecosystem Subcommittee of CAFSAC, Oct. 27-29, 1981.

Platt, T. 1971. Exchange of plankton in semi-enclosed marine basins. Symposium on Water Exchange in Semi-enclosed Sea Bays. XVth General assembly IUGG, Moscow, 1971.

Platt, T. 1973. Local differences in energy efficiency of natural phytoplankton populations. Prepared for Plankton Committee, International Council for the Exploration of the Sea, Lisbon, 1973.

Platt, T. 1975a. Predictability of primary production and budget calculations in coastal inlets. 10 th European Symposium on Marine Biology, Ostend, Belgium 2: 477-484.

Platt, T. 1975b. Analysis of the importance of spatial and temporal heterogeneity in the estimation of annual production by phytoplankton in a small, enriched, marine basin. J. Exp. Mar. Biol. Ecol. 18: 99-109.

Platt, T. 1975c. The light-saturation curve for natural populations of marine phytoplankton. II. Seasonal variation. Prepared for Plankton Committee, International Council for the Exploration of the Sea, Montreal, Canada, 1975.

Platt, T. 1976. New data on the relationship between photosynthesis and light for natural populations of coastal marine phytoplankton. Prepared for Plankton Committee, International Council for the Exploration of the Sea, Copenhagen, October, 1976.

Platt, T., R.J. Conover, R. Loucks, K.H. Mann, D.L. Peer, A. Prakash and D.D. Sameoto. 1970. A study of a eutrophicated marine basin. Contribution to the FAO Technical Conference on Marine Pollution and Its Effects on Living Resources and Fishing. Rome, Italy, 10 p.

Platt, T. and R.J. Conover. 1971. Variability and its effect on the 24 h chlorophyll budget of a small marine basin. Mar. Biol. 10: 52-65.

Platt, T. and C. Fillion. 1973. Spatial variability of the productivity:biomass ratio for phytoplankton in a small marine basin. Limnol. Oceanogr. 18: 743-749.

Platt, T. and B. Irwin. 1971. Phytoplankton production and nutrients in Bedford Basin, 1969-1970. Fish. Mar. Ser. Tech. Rept. No. 247, 172 p.

Platt, T. and B. Irwin. 1972. Mapping the chlorophyll concentration in Bedford Basin, Nova Scotia. Fish. Mar. Ser. Tech. Rept. No. 299, 6 p.

Platt, T., B. Irwin and D.V. Subba Rao. 1973. Primary productivity and nutrient measurements on the spring phytoplankton bloom in Bedford Basin, 1971. Tech. Rept. Fish. Res. Board Can. 423, 42 p.

Platt, T. and A.D. Jassby. 1975. The light-saturation curve for natural populations of marine phytoplankton. I. Optimizing the mathematical representation. Prepared for Plankton Committee, International Council for the Exploration of the Sea, Montreal, Canada, 1975.

Platt, T., A. Prakash and B. Irwin. 1972. Phytoplankton nutrients and flushing of inlets on the coast of Nova Scotia. Nat. Can. 99: 253-261.

Platt, T., S. Sathyendranath, C.C. Caverhill and M.R. Lewis. 1988. Ocean primary production and available light: further algorithms for remote sensing. Deep-Sea Res. 35: 855-879.

Platt, T. and D.V. Subba Rao. 1970a. Primary production measurements on a natural plankton bloom. J. Fish. Res. Board Can. 27: 887-899.

Platt, T. and D.V. Subba Rao. 1970b. Energy flow and species diversity in a marine phytoplankton bloom. Nature 227: 1059-1060.

Platt, T., D.V. Subba Rao and K.L. Denman. 1977. Quantitative stimulation of phytoplankton productivity by deep water admixture in a coastal inlet. J. Est. and Coastal Mar. Sci. 5:567-573.

Pocklington, R., J.D. Leonard and N.F. Crewe. 1987. Le coprostanol comme indicateur de la contamination fecale dans l'eau de mer et les sediments marins. Oceanol. Acta 10: 83-89.

Porter Dillon Ltd. 1986. City of Halifax, Herring Cove sewage outfall study. Porter Dillon Ltd, 2651 Dutch Village Road, Halifax, N.S.

Pringle, J.D. 1975. Studies on variation in three taxa of Enteromorpha. Ph.D. Thesis, Dalhousie University, Halifax, N.S. 237 p.

Pringle, J.D. 1986. Swarmer release and distribution of life cycle phases of Enteromorpha intestinalis (L.) (Chlorophyta) in relation to environmental factors. J. Exp. Mar. Biol. Ecol. 100: 97-111.

Prouse, N.J. and B.T. Hargrave. 1987. Organic enrichment of sediments in Bedford Basin and Halifax Harbour. Can. Tech. Rept. Fish. Aquat. Sci. 1571, 36 p.

Riley, G.A., A. Pease, D. Stucchi and R. Loucks. 1974. Oceanography of the Halifax Inlet in relation to problems of sewage disposal. Report to Dept. of Environment, Province of Nova Scotia, Sept. 1974, 44 p.

Ruddick, B. 1984. Review of physical oceanography of Halifax Harbour. Appendix B in ASA Consulting Ltd. Halifax Inlet Water Quality Study, Phase I, Metropolitan Area Planning Commission, January 1985.

Ruffman, A., A. Heyes and J. Clarke. 1987. The eastward extension of the great dyke of Nova Scotia to the mouth of Halifax Harbour. Atl. Geoscience Soc., 1987 Symp. Maritime Sediments and Atlantic Geology 23: 106.

Sameoto, D.D. 1971. Macrozooplankton biomass measurements in Bedford Basin, 1969-71. Fish. Res. Board Can. Tech. Rept. No. 282, 238 p.

Sameoto, D.D. 1973. Annual life cycle and productivity of the Chaetognath Sagitta elegans in Bedford Basin, Nova Scotia. J. Fish. Res. Board Can. 30: 333-344.

Schafer, C.T. and A. Prakash. 1968. Current transport and deposition of foraminiferal tests, planktonic organisms and lithogenic particles in Bedford Basin, Nova Scotia. Mar. Sediments 4: 100-103.

Sinclair, M., D.V. Subba Rao and R. Couture. 1981. Phytoplankton temporal distributions in estuaries. Oceanol. Acta 4: 239-246.

Smith, J.C., T. Platt and W.G. Harrison. 1983. Photoadaptation of carboxylating enzymes and photosynthesis during a spring bloom. Prog. Oceanogr. 12: 425-459.

Spaulding, M.L. 1984. Selection of hydrodynamic and water quality models for application to Halifax Harbour and Bedford Basin. Appendix A in ASA Consulting Ltd. Halifax Inlet Water Quality Study, Phase I, Metropolitan Area Planning Commission, January 1985.

Stanley, D.J. 1968. Reworking of glacial sediments in the Northwest Arm, a fjord-like inlet on the southeast coast of Nova Scotia. J. Sed. Petrol. 38: 1224-1241.

Stewart, J.M. 1975. Survey of gypsum cargo jettisoned from M/V Colon Brown, Lighthouse Bank, Halifax Harbour, Nova Scotia, Canada. Geol. Survey Can. Open File 393, 11p.

Stucchi, D. 1975. Seiches in the Northwest Arm of Halifax Harbour. M.Sc. Thesis, Dalhousie University, Halifax, N.S.

Subba Rao, D.V. 1975. Phytoplankton production, nutrients and density structure in the shelf area of Nova Scotia and Georges Bank during August, 1974. Fish. Mar. Ser. Tech. Rept 524, 272 p.

Subba Rao, D.V. 1980. Measurement of primary production in phytoplankton groups by size-fractionation and by germanic acid inhibition techniques. Oceanol. Acta 3: 31-42.

Subba Rao, D.V. 1981a. Effect of boron on primary production of nannoplankton. Can. J. Fish. Aquat. Sci. 38: 52-58.

Subba Rao, D.V. 1981b. Growth response of marine phytoplankters to selected concentrations of trace metals. Bot. Mar. 24: 369-379.

Subba Rao, D.V. and S.J. Smith. 1987. Temporal variation of size-fractionated primary production in Bedford Basin during the spring bloom. Oceanolo. Acta 10: 101-109.

Sutcliffe, W.H. Jr. and R.H. Loucks. 1976. Coastal circulation and physical oceanography of the Scotian Shelf and the Gulf of Maine. J. Fish. Res. Board Can. 33: 98-115.

Taguchi, S. 1981. Seasonal studies of the dinoflagellate, Ceratium longipes (Bailey) Gran, in the Bedford Basin, Canada. J. Exp. Mar. Biol. Ecol. 55: 115-131.

Taguchi, S. and B.T. Hargrave. 1978. Loss rates of suspended material settled in a marine bay. J. Fish. Res. Board Can. 35: 1614-1620.

Taguchi, S., M. Hodgson and T. Platt. 1975. Phytoplankton production and nutrients in Bedford Basin 1973 and 1974. Can. Fish. Mar. Ser. Tech. Rept. No. 587, 42 p.

Taguchi, S. and P. Mayzaud. 1975. Nutritional value of particulate matter in the zooplankton maximum layer of the Bedford Basin, N.S., Canada. Abst. Ann. 38th Meeting Limnol. Oceanogr., Dalhousie Univ., Halifax, N.S.

Taguchi, S. and T. Platt. 1977. Assimilation of $^{14}\text{CO}_2$ in the dark compared to phytoplankton production in a small coastal inlet. Est. Coastal Mar. sci. 5: 679-684.

Taguchi, S. and T. Platt. 1978a. Phytoplankton biomass in Bedford Basin: volume, surface area, carbon content and size distribution. Can. Fish. Mar. Ser. Data Rept. No. 55, 404 p.

Taguchi, S. and T. Platt. 1978b. Size distribution and chemical composition of particulate matter in Bedford Basin, 1973 and 1974. Can. Fish. Mar. Ser. Tech. Rept. 56, 370 p.

Tan, F.C. and A. Walton. 1975. The application of stable carbon isotope ratios as water quality indicators in coastal areas of Canada, pp. 35-47. In Isotope Ratios as Pollutant Sources and Behavior Indicators. Int. Atomic Energy Agency, Vienna.

Tennant, A.D. and J.A.P. Bastien. 1965. Bacteriological surveys, 1965. Shellfish area N.S. 23-Halifax. Dept. of National Health and Welfare, Manuscript Reports of the Public Health Engineering Division.

Von Borstel, B.B. 1975. The physical behavior of oil in sandy beaches, McNabs Island, Nova Scotia. M.Sc. Thesis, Dalhousie University, Halifax, N.S.

Waller, D.H. 1977. Shellfish area contamination in the Maritime Provinces. Vol. I. Report to Environmental Protection Service, Environment Canada.

Waller, D.H. 1985. Determination of pollution loads to Halifax Harbour. Appendix C in Halifax Inlet Water Quality Study, Phase I, Metropolitan Area Planning Commission, January 1985.

Waller, D.H., K.V. Lo, E. Langman and A.E. Waller. 1976. Shellfish closure areas in the Maritime Provinces. Vol. II. Report on shellfish area contamination in the Maritime Provinces. Report to Environmental Protection Service, Environment Canada, October 1976.

Warnock Hersey Soil Investigation Ltd. 1966. Soil investigations, Narrows Bridge, Halifax Harbour, Nova Scotia. Report to Halifax-Dartmouth Bridge Commission, 23 p.

Warnock Hersey Soil Investigation Ltd. Report on results of drilling at Lawlor Island and Eastern Passage. Nova Scotia Dept. of Highways.

Whitman, Benn and Associates (1969) Ltd. 1972. Report, seismic survey, Bedford Basin, Halifax, Nova Scotia. Report to National Harbours Board, Halifax, Nova Scotia. 20 p.

HYDROGRAPHIC, GEOLOGICAL, GEOPHYSICAL AND GEOTECHNICAL MAPS

Canadian Hydrographic Service. (unpublished, no date). Bedford Basin contoured bathymetry. C.H.S. Field Sheet No. -878 H-8 (Scale 1:7200).

Canadian Hydrographic Service. 1966a. Halifax Harbour Tunnel Feasibility Study. C.H.S. Field Sheet No. 4139A (Scale 1:5000).

Canadian Hydrographic Service. 1966b. Halifax Harbour Tunnel Feasibility Study. C.H.S. Field Sheet No. 4139B (Scale 1:5000).

Canadian Hydrographic Service. 1987. Nova Scotia-Southeast Coast Osborne Head to Betty Island C.H.S. 4385 (Scale 1:36480)

Canadian Hydrographic Service. 1988a. Halifax Harbour Bedford Basin. C.H.S. Chart 4201 (Scale 1:10000).

Canadian Hydrographic Service. 1988b. Halifax Harbour Point Pleasant to Bedford Basin. C.H.S. Chart 4202 (Scale 1:10000)

Canadian Hydrographic Service. 1988c. Halifax Harbour Black Point to Point Pleasant. C.H.S. Chart 4203. (Scale 1:10000)

Geological Survey of Canada. 1960. Map 789G, Halifax, Halifax County, Nova Scotia total magnetic field.

Geological Survey of Canada. 1966. Map 7031G, Halifax, Nova Scotia total magnetic field.