Canadian-Climate Impacts and Adaptation Research Network – Fisheries Node: A Bibliography of Pacific Climate Change and Fisheries Research Compiled from 2002-2005

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CANADIAN-CLIMATE IMPACTS AND ADAPTION RESEARCH NETWORK – FISHERIES NODE: A BIBLIOGRAPHY OF PACIFIC CLIMATE CHANGE AND FISHERIES RESEARCH COMPILED FROM 2002-2005

by

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ABSTRACT

Wade, J., Byington, J., Stockwell, M.M., Hunter, K.L., and Hyatt, K.D. 2014. Canadian-Climate Impacts and Adaptation Research Network – Fisheries Node: A bibliography of Pacific climate change and fisheries research compiled from 2002-2005.Can. Manuscr. Rep. Fish. Aquat. Sci. 3050: iii + 47p.

As a part of the activities of the Canadian Climate Impacts and Adaptation Research Network (C-CIARN) funded by a Natural Resources Canada in the early 2000s, a climate change and adaptation library was created by the C-CIARN Fisheries Node located at Fisheries and Oceans Canada, Nanaimo, BC. Bibliographic information relating to climate change and fisheries was collected by C-CIARN funded staff from 2002 to 2005 and stored in a Microsoft Access database. From over 8000 entries, we sorted the database by records relevant to the Pacific coast of Canada and British Columbia. We present the resulting bibliography in two parts: primary publications and technical reports and, other documents.

RÉSUMÉ

Wade, J., Byington, J., Stockwell, M.M., Hunter, K.L., and Hyatt, K.D. 2014. Canadian-Climate Impacts and Adaptation Research Network – Fisheries Node: A bibliography of Pacific climate change and fisheries research compiled from 2002-2005.Can. Manuscr. Rep. Fish. Aquat. Sci. 3050: iii + 47p.

Dans le cadre des activités du Réseau canadien de recherche sur les impacts climatiques et l'adaptation (C-CIARN) financées par Ressources naturelles Canada au début des années 2000, une bibliothèque sur les changements climatiques et l'adaptation a été créée par le nœud relatif aux pêches du C-CIARN qui est situé au sein de Pêches et Océans Canada, à Nanaimo (Colombie-Britannique). Les renseignements bibliographiques concernant le changement climatique et les pêches ont été recueillis de 2002 à 2005 par le personnel du C-CIARN visé par le financement en question, et ils ont été entreposés dans une base de données Microsoft ACCESS. À partir de plus de 8000 entrées, nous avons classé les données en fonction des dossiers ayant trait à la côte canadienne du Pacifique et à la Colombie-Britannique. Nous présentons en deux parties la bibliographie qui découle de ce travail : publications primaires et livres et rapports techniques; comptes rendus de conférences et d'ateliers, et thèses.

INTRODUCTION

The Climate Change Impacts and Adaptation Program was a Natural Resources Canada (NRCAN) program in the late 1990s to mid-2000s. It grew out of the federal government's Climate Change Action Fund set up in 1998. The objective of CCIAP was to improve the knowledge of Canada's vulnerability to climate change in order to assist decision makers on adaptation and to better assess the risks posed by climate change. As a part of this program, NRCAN funded the Canadian Climate Impacts and Adaptation Research Network (C-CIARN) for 6 years at a total cost of $8.3 million. The goal of C-CIARN was to help coordinate researchers and stakeholders by providing a central contact point for climate impact and adaptation research information. There were six regional (BC, Prairies, Ontario, Quebec, Atlantic and, North) and seven sectoral (Health, Landscape hazards, Coastal zone, Fisheries, Forests, Water and, Agriculture) nodes. Each node was tasked with activities related to the communication of climate impacts and adaptation which included the maintenance and sharing of data on research and research findings. The sectoral node for Fisheries was located at the Pacific Biological Station in Nanaimo, BC.

In response to this mandate, between 2002 and 2005, bibliographic information was collected by staff at the Fisheries node and placed in a data repository in Microsoft Access. From here it could be retrieved for researchers upon request. From this data repository, bibliographic information pertaining to the Pacific region has been collated and presented here.

METHODS

The data repository was populated with information derived from daily general internet searches by staff at the Fisheries Node of C-CIARN. For one hour a day, from 2002 to 2005, these data were entered into Microsoft Access as well as a hard copy printed and held in the office for use by local researchers upon request. Because this activity was not performed as a stand-alone project, there exists little meta-data documentation. However the primary staff member who performed the searches and populated the database has confirmed search terms and general methodologies.

The open web, Google Scholar and WAVES[1] were used to search climate related terms which included but were not limited to: "climate change", "climate change Canada", "Arctic", "fisheries", "freshwater", " saltwater", "fish", "oceans", "marine mammal" and combinations of these search terms. Embedded links within documents and web-pages were followed when a suitable article was found. Types of materials searched included webpages, government webpages (Federal, Provincial, departmental), academic webpages, and online grey and primary literature.

In addition to the active open web search, researchers within the National C-CIARN network were asked to provide any references pertaining to climate and climate changes and adaptations, with particular emphasis on fisheries in Canada.

[1] WAVES is the DFO library online catalogue and primary reference search engine.

The bibliographic reference fields which were populated in Microsoft ACCESS included: "Authors_All", "Year Published", "Title", "Author Contact", "Organization", "Format", "Publisher_Journal", "Website", "Geographic_Extent", "Summary_ Abstract" and "Keywords".

In creating this bibliography, all records were downloaded from Microsoft Access to Microsoft Excel. Records were sorted according to "Geographic_Extent" and those not pertaining to British Columbia or environs were eliminated. Because the entries under "Geographic_Extent" were not necessarily consistent different key words were used to screen in entries. For example, many entries had multiple areas listed under "Geographic_Extent" such as "Eastern Bering Sea, Gulf of Alaska, Arctic, Pacific" or "Alberta, Saskatchewan, British Columbia, boreal, inland, North". Entries with these descriptors would be kept in because of the word "Pacific" in the first example and "British Columbia" in the second. Generally speaking, any entries which contained the following words, or combinations thereof, under "Geographic_Extent" were kept in: "Alaska" "Pacific Ocean", "British Columbia", "Eastern Pacific Ocean", "Pacific Ocean British Columbia", "California Current ecosystem", "Pacific Northwest, Washington". Because of continuous waters, coastal references to "Alaska" and "Pacific Northwest, Washington" were not eliminated. Locations which were undoubtedly from British Columbia but did not specifically say so were included as well, for example "Cheakamus River" and "West Coast Vancouver Island".

From this extensive list, the authors reviewed each entry and determined whether or not they were to be included in the final bibliography based on their climate change related relevance.

RESULTS

The entire Microsoft ACCESS database consisted of 8805 individual entries. These entries were categorized under "Geographic_Extent" as being from all regions of Canada and many countries, continents and regions of the world; Antarctic, Asia, Spain, Bay of Fundy, Russia, Brazil, USA and Britain to name a few.

These 8805 entries included but are not exclusive to: primary scientific publications, grey literature, proceedings, presentations, book chapters, webpages, theses and fact sheets. Once the 8805 entries were sorted according to geography as described previously, there were 924 entries remaining. A further refinement of the bibliographic list by the authors has resulted in the 532 entries presented in Appendix 1.

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APPENDIX I

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