

1800s

1900s

1930s

1950s

1960s

1970s

1980s


1867+ - First Nations fought for conservation, protection and respect for the environment.




1868 - Creation of Department of Marine and Fisheries (Fisheries and Oceans Canada)



1885 – Canada’s first National Park (Banff National Park)



1900 - Canadian Forestry Association established to promote forestry conservation



1905 – First Wildlife Conservation Society engagement – William Hornaday started conservation efforts for Crowsnest Pass, B.C.



1909 – Commission of Conservation established to provide Canadian governments advice on the conservation of natural resources (dissolved in 1921)


1929 - Helen Irene Battle is the first woman to receive a PhD in marine biology in Canada. She went on to become a professor at University of Western Ontario, and cofounded the Canadian Society of Zoologists. She received the Canada Centennial medal in 1967.



1929 - Founding of the Royal Canadian Geographical Society



1937 Alice Evelyn Wilson, a paleontologist with the Geological Survey of Canada, is the first woman to be elected a fellow of the Royal Society of Canada; in 2005 she was inducted into the Canadian Science and Engineering Hall of Fame, posthumously.



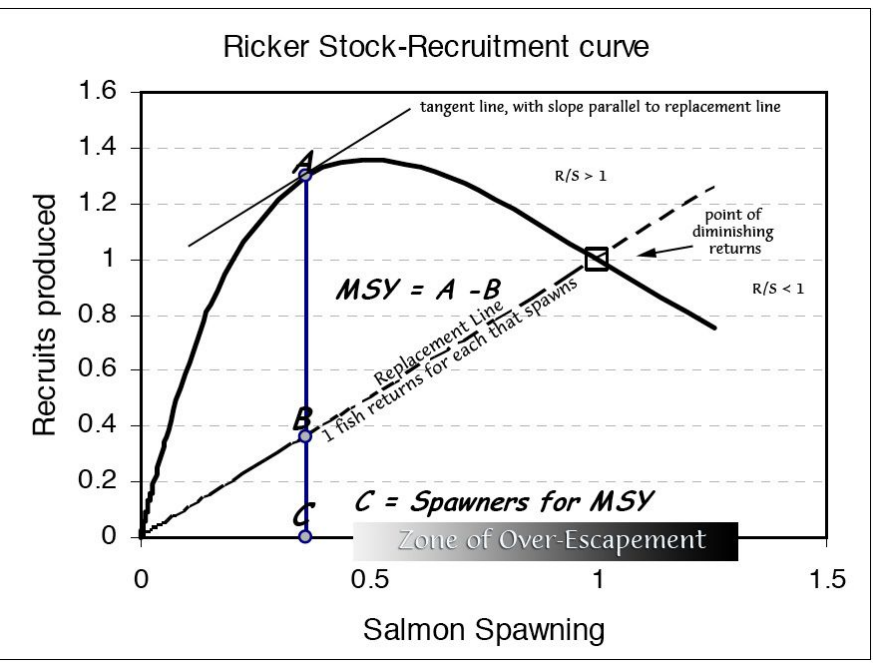
1950 -Canadian Wildlife Service was established to protect and manage migratory birds and their nationally important habitats; known for producing “Hinterland Who’s Who”: educational video clips about Canada’s native wildlife




1958 - Polar Continental Shelf Project created to study the Arctic environment



Late 1950’ to 60’s – William Ricker developed the Ricker curve to determine sustainable fisheries catches




1968 – Foundation of the Experimental Lakes Area (ELA) to study effects of contaminants on lake ecosystems. ELA has produced 745 peer-reviewed scientific articles and 126 graduate theses.




1971 – Greenpeace founded in Vancouver




1977 – David Schindler (Univ. of Alberta) publishes “Evolution of phosphorus limitation in lakes” in Science. A key driver of establishing the Experimental Lakes Area, he also holds the NSEC Gerhard Herzberg Canada Gold Medal, RSC Romanowski Medal, SETAC Rachel Carson award, and is in the Order of Canada.



1971 - Creation of Environment Canada (now Environment and Climate Change Canada)



1976 - David Suzuki (Nature of Things, Quarks and Quirks) receives the Order of Canada for environmental activism



1974 – First Aquatic Toxicity Workshop (now Canadian Ecotoxicity Workshop)

1978 – NSERC created to provide grants for research in science and engineering



1979 - SETAC founded in North America

1980 – First Earth Day in Canada



1982 – First undergraduate toxicology program in Canada is established at University of Guelph



1984 - Suzanne Blais-Grenier becomes the first female Minister of the Environment



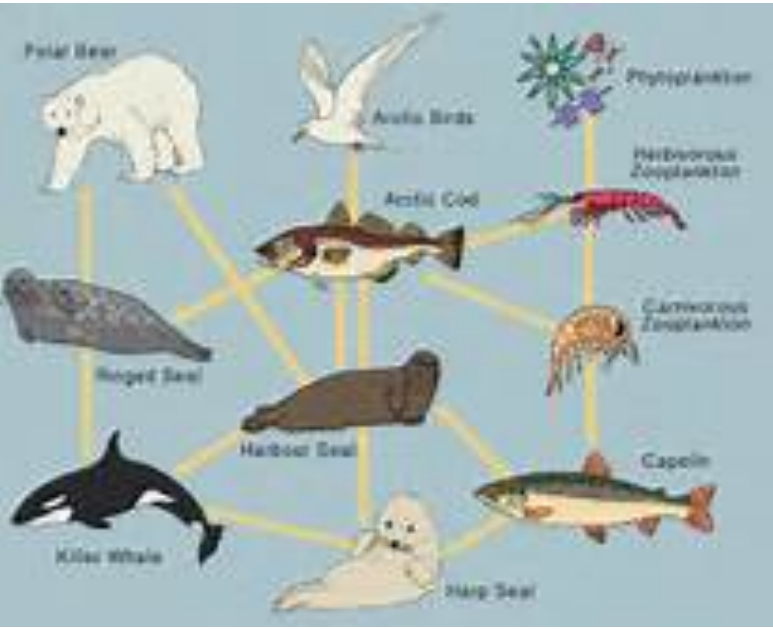
1983 -Gertrude Moltke Bernard (CM Anahareo), a Mohawk Canadian writer, receives the Order of Canada for her work on wildlife conservation



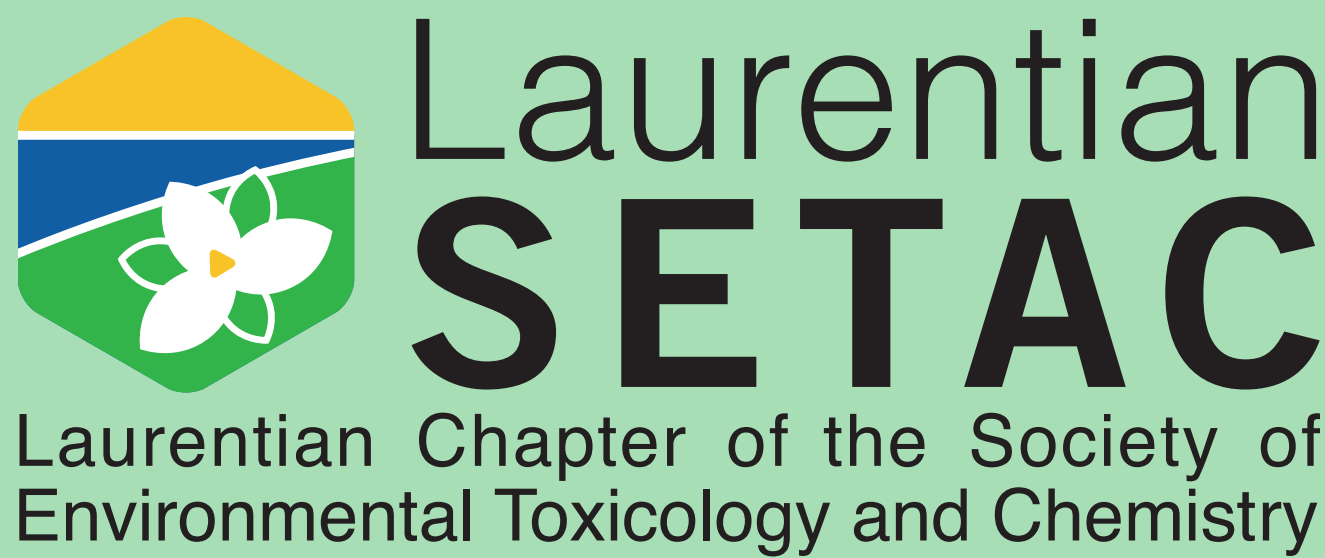
1985 – The Fisheries Act

1987 - Montreal Protocol to limit the emission of CFCs

1988 - Derek Muir (ECCC) publishes “Organochlorine contaminants in Arctic marine food chains. “ in ES&T (400+ citations). He went on to be a SETAC Founder Award holder, SETAC Fellow and Royal Society of Canada Fellow.




1989 - John B. Sprague (Univ. of Guelph) is the 1st Canadian to win SETAC’s Founders Award for his research on aquatic toxicity testing.



150 Years of Environmental Science in Canada


A look at the progression of environmental science, regulation, and its women’s leadership

1991 – Northern Contaminants Program is established by Indigenous and Northern Affairs Canada




1991 Canada-United States Air Quality Agreement

1992 - Jack Vallentyne (Queen’s University and DFO) is awarded SETAC’s Rachel Carson award. He pioneered the Experimental Lakes Area.



1993 – the Canadian Society for Chemistry announces the Clara Benson award to recognize women who have made a distinguished contribution to chemistry in Canada

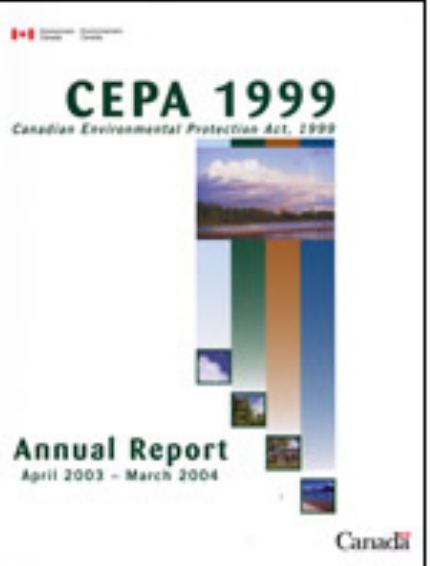


1996 - Don Mackay and Frank Wania (Univ. of Toronto) publish “Tracking the distribution of persistent organic pollutants” in ES&T (800+ citations).

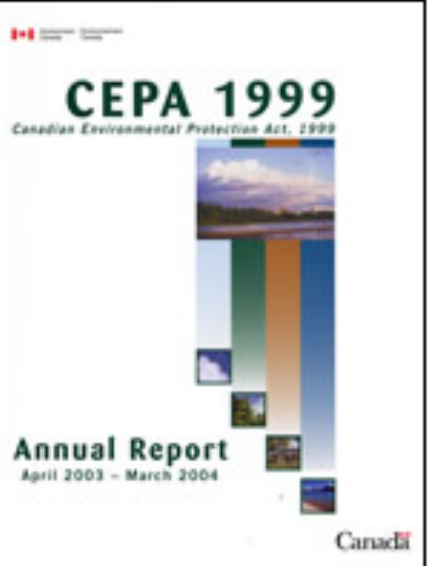
~1996 – L-SETAC established

1997 – The Kyoto Protocol established (international treaty to reduce greenhouse gas emissions)

1998 - Richard J. Beamish (DFO) receives the Order of Canada as a fisheries scientist for his acid rain research.




1999 – Canadian Environmental Protection Act (CEPA)



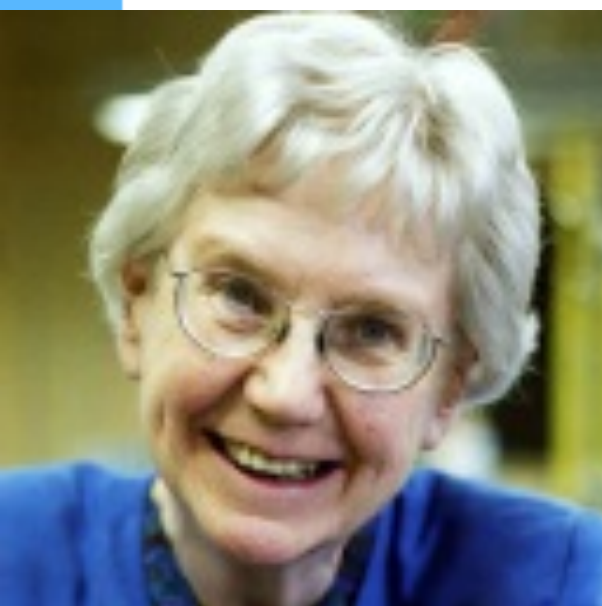
2001 – Stockholm Convention on Persistent Organic Pollutants (POPs)

2003 - Donald Mackay (Univ. of Toronto) receives the Order of Canada. He developed models for environmental fate of contaminants and is featured in a tribute issue of ET&C



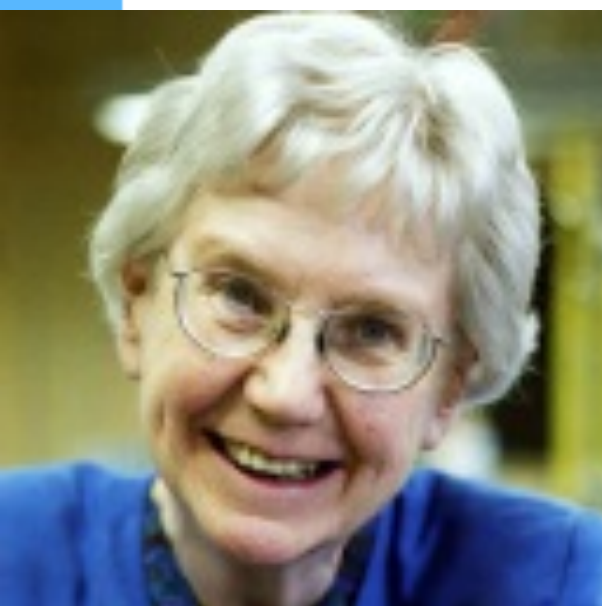
2004 - John Smol (Queen’s University) receives the Gerhard Herzberg Canada Gold Medal by NSERC. He published one of the first studies on the impact of climate change in Arctic ecology. In 2013, he was inducted into the Order of Canada.

2006 – Margaret-Ann Armour (Univ. of Alberta) receives the Order of Canada for encouraging young Canadian women to pursue careers in science and engineering.




2007 – Miriam Diamond (Univ. of Toronto) is named Canadian Environmental Scientist of the Year. An associate editor of ES&T, she is also a Canadian Geographical Society fellow and SETAC fellow.

2007 - Karen Kidd (Univ. of New Brunswick) publishes “Collapse of a fish population after exposure to a synthetic estrogen” in Proc. Natl. Acad. Sci. based on a 7 year study at the ELA (cited 800+ times). Dr. Kidd is one of the few female holders of the Tier 1 Canada Research Chair (2015-2022).



2007 - Sheila Watt-Cloutier, Canadian Inuit activist, is nominated for the Nobel Peace Prize. In the same year she won the Rachel Carson Prize in Norway for her work on social and environmental issues affecting Inuit, including climate change and POPs.



2002 – Species at Risk Act

- Under this act, anyone who harms or threatens endangered animals can be prosecuted
- Max penalties
 - For-profit corporation: \$1 million
 - Non-profit corporation: \$250,000
 - Individual: \$250,000 and/or up to 5 years

2009 - Ontario Toxics Reduction Act

2009 - Ontario introduces a provincial law banning pesticide use on residential lawns


2011 - Canada withdraws from the Kyoto Protocol

2012 - Bill C-38 Act (slashed, notably, the Fisheries Act, the Canadian Environmental Protection Act, and the Species at Risk Act)

2012 - Catherine Potvin (McGill University) is the first woman to be awarded the Miroslaw Romanowski Medal from the Royal Society of Canada (for significant contributions to environmental research)

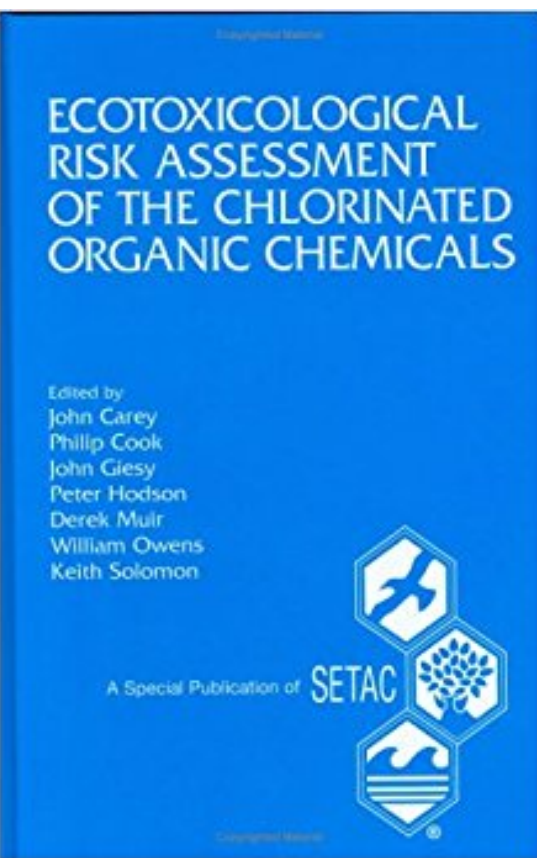
2013 - Philippe Van Cappellen (Univ. of Waterloo) earns Canada Excellence Research Chair in Ecohydrology for revolutionizing water management strategies on a global scale.

2015 - Kristy Duncan is appointed as Canada’s first Minister of Science



2016 - Canada ratifies the Paris Agreement on climate change.

2013 - John Giesy (Univ. of Saskatchewan) wins the Miroslaw Romanowski Medal from Royal Society of Canada and the SETAC Capacity Building Award. He previously won the SETAC Menzie-Curra Environmental Education award and the SETAC Founders award. He published the first paper on perfluorooctane sulfonate in wildlife in 2001 in ES&T (1300+ citations).

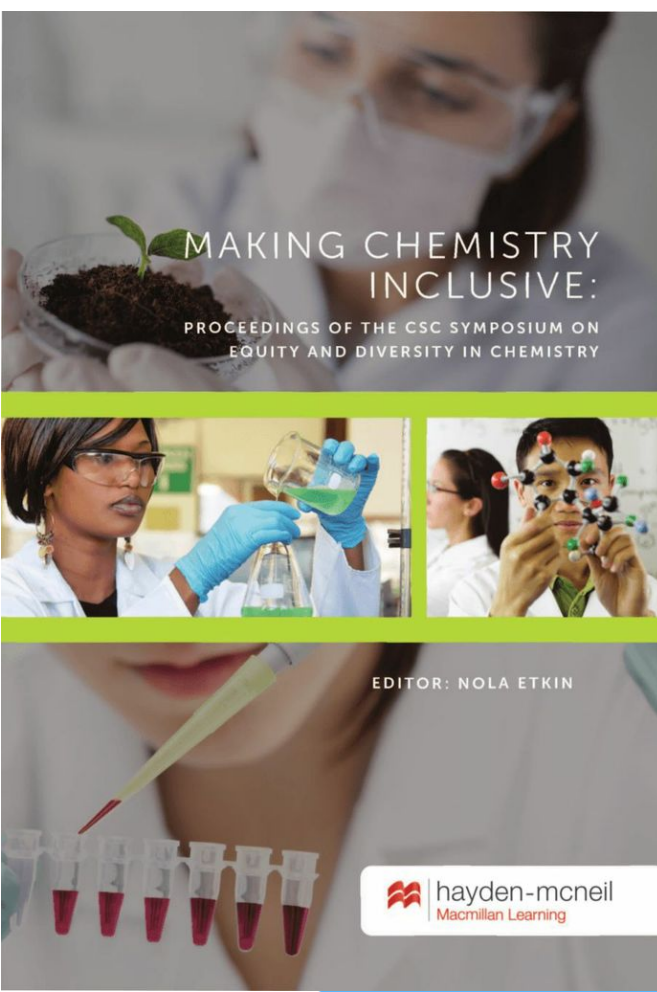


2011 – Monique Dubé (Univ. of Saskatchewan) wins Environmentalist of the Year award from Canadian Geographic for her efforts on healthy river ecosystem assessments

2010 - Parisa Ariya (McGill University) wins the Clara Benson Award from the Canadian Society for Chemistry for her research achievements in atmospheric chemistry at environmental interfaces


2016 – Barbara Sherwood Lollar (Univ. of Toronto) receives the Bancroft Award from the Royal Society of Canada for her water research. She was named one of the “Top Canadians Changing the World” by Canadian Geographic, is in the Order of Canada, and holds the NSERC John C. Polanyi Award

2014 – Elizabeth Edwards (Univ. of Toronto) receives a Tier 1 Canada Research Chair to study microbial degradation of contaminants. She was inducted as a fellow into the Royal Society of Canada in 2012.




2016 - Hind A. Al-Abadleh (Wilfrid Laurier University) receives the Canadian Foundation for Innovation John R. Evans Leaders Fund for environmental chemistry research. She wrote “The Centrality of Human Diversity to Advancement and Innovation in Chemical Research and Education in the 21st century”, in the book *Making Chemistry Inclusive*.


2014 – Ursula Franklin (Univ. of Toronto) is recognized by the Status of Women in Canada as a pioneer who inspired change through leadership. She was the first woman to be granted University Professor at U of T, received the Governor General’s award for promoting equality of girls and women, was inducted into the Canadian Science and Engineering Hall of Fame, and received the Order of Canada. She was an early champion for gender pay equity.



2017 – Deborah MacLatchy (Wilfrid Laurier University) is appointed president and vice-chancellor of Wilfrid Laurier University. Dr. MacLatchy was L-SETAC’s first featured mentor in its Spotlight on Mentors series.




2017 – Revision of the Fisheries Act

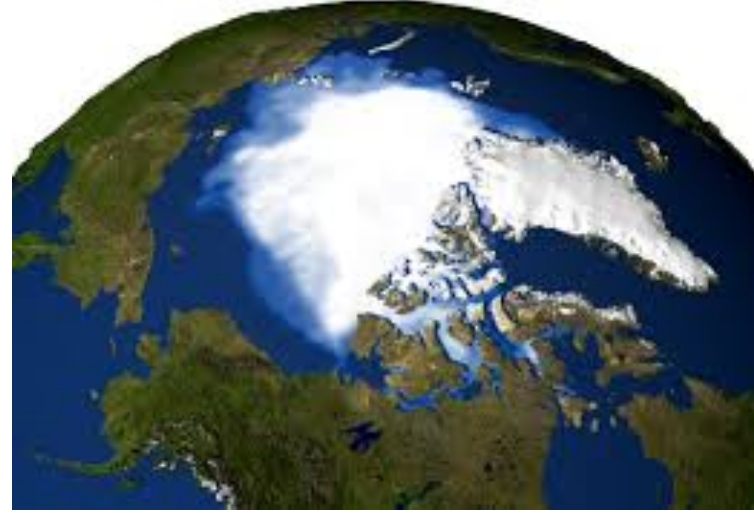


2015 - McMaster University announces that female faculty members will receive a \$3,515 increase in salary to address the gender-related pay gap

2016 – Univ. of Waterloo announces that female faculty will receive a pay increase to address a gender-related wage gap.



2017 – David Barber (Univ. of Manitoba) is appointed to officer of the Order of Canada for environmental science research on the study of Arctic sea ice.



2017 - Dr. Xing-Fang Li (Univ. of Alberta) is the first woman recipient of the Canadian Society for Chemistry’s DIMA award for distinguished contributions to research in environmental chemistry.

2016 - L-SETAC Women In Science Committee (WISC) established to highlight women’s achievements, raise awareness of gender disparity in science, and create mentorship opportunities.

Contact us!
info@laurentiansetac.ca

1990s

2000s

2010s