

## Questionnaire on Biodiversity and School Curricula Summary Document

**February 2018**

In 2017-18, Canadian provinces and territories were invited to complete a questionnaire about the integration of biodiversity in school curriculum. The results are a key source of information for reporting on Canada's 2020 biodiversity Target 18: By 2020, biodiversity is integrated into the elementary and secondary school curricula. The indicator for reporting on Target 18 is: The number of jurisdictions that have integrated biodiversity into elementary and secondary curricula. Ten out of 13 provinces and territories responded to the questionnaire. The results of the questionnaire follow.

**1. Is biodiversity identified as a specific unit or theme in the school curriculum of your province or territory?**

Province/ Territory	Specific Unit?	Subject Areas	Grade Level
BC	Yes	Environmental Science	11
AB	Yes	Science, Knowledge and Employability Science	9
SK	--		
MB	Yes	Science (Biology)	12
Yukon	Yes	Environmental Science	11
NWT	Yes	Science & Experiential Science	9, 10, 11
Nunavut	--		
ON	Yes	Science Science	6 11
PQ	Yes	Science and Technology	1 <sup>st</sup> & 4 <sup>th</sup> secondary
NB	Yes	Science	K-12
NS	--		
PEI	Yes	Science	7, 9, 10, 11, 12
NL	Yes	Science	11, 12

**2. Please identify which of the following topics or concepts is contained within your provincial or territorial curriculum (please check all that apply).**

Topics/Concepts	Grade Level [Elementary: K-8, Secondary 9-12]	Subject	Notes
<b>The science of the diversity of life</b>			
Habitats and communities	Elementary/Secondary	Science	AB
	Secondary	Science & Technology	PQ
	Elementary/Secondary	Science	NWT
	Elementary/Secondary	Science	NL

Topics/Concepts	Grade Level [Elementary: K-8, Secondary 9-12]	Subject	Notes
	Secondary Elementary/Secondary Elementary/Secondary Elementary Elementary/Secondary	Science Science Science Science Science	BC, YK NB PEI MB ON
Diversity and similarity or relatedness of living things	Elementary/Secondary  Secondary Elementary Elementary/Secondary Secondary Elementary/Secondary Elementary/Secondary Elementary/Secondary Elementary/Secondary	Science, Career & Technology Studies Science and Technology Science Science Science Science Science Science	AB  PQ NWT NL BC, YK NB PEI MB ON
Evolution, adaptation, natural selection and survival	Elementary/Secondary Secondary Elementary/Secondary  Elementary/Secondary Secondary Elementary/Secondary Elementary/Secondary Elementary/Secondary Secondary	Science Science & Technology Science, Science & Technology Science Science Science Science Science Science	AB PQ NWT  NL BC, YK NB PEI MB ON
Species diversity	Elementary/Secondary Secondary Secondary Elementary/Secondary Secondary Elementary/Secondary Elementary/Secondary Secondary Elementary/Secondary	Science Science & Technology Science Science Science Science Science Science Science	AB PQ NWT NL BC, YK NB PEI MB ON
Genetic diversity	Secondary Secondary Secondary Secondary Secondary Secondary	Science Science & Technology Science Science Science Science	AB PQ NWT NL BC, YK NB

Topics/Concepts	Grade Level [Elementary: K-8, Secondary 9-12]	Subject	Notes
	Secondary	Science	PEI
	Secondary	Science	MB
	Elementary/Secondary	Science	ON
Composition, structure and function of biological systems	Elementary/Secondary	Science	AB
	Secondary	Science & Technology	PQ
	Secondary	Science	NWT
	Elementary/Secondary	Science	NL
	Secondary	Science	BC
	Secondary	Science	NB
	Elementary/Secondary	Science	PEI
	Elementary	Science	MB
	Elementary/Secondary	Science	ON
<b>The role of living things within ecosystems</b>			
Interdependence of species and resilience as a measure of biodiversity	Elementary/Secondary	Science	AB
	Secondary	Science & Technology	PQ
	Elementary/Secondary	Science	NL
	Secondary	Science	BC, YK
	Elementary/Secondary	Science	NB
	Elementary/Secondary	Science	PEI
	Elementary/Secondary	Science	MB
	Elementary/Secondary	Science	ON
Food webs	Elementary/Secondary	Science	AB
	Secondary	Science & Technology	PQ
	Elementary/Secondary	Science	NWT
	Elementary/Secondary	Science	NL
	Secondary	Science	BC, YK
	Elementary	Science	NB
	Elementary/Secondary	Science	PEI
	Elementary	Science	MB
	Elementary	Science	ON
Diversity of ecosystems and change	Elementary/Secondary	Science	AB
	Secondary	Science & Technology	PQ
	Secondary	Science	NWT
	Elementary/Secondary	Science, Geography	NL
	Secondary	Science	BC, YK
	Elementary/Secondary	Science	NB
	Elementary/Secondary	Science	PEI
	Elementary	Science	MB
	Elementary	Science	ON
Ecosystem health or integrity	Elementary/Secondary	Science, Social Studies	AB
	Elementary/Secondary	Science	NL
	Secondary	Science	BC, YK

Topics/Concepts	Grade Level [Elementary: K-8, Secondary 9-12]	Subject	Notes
	Elementary/Secondary Elementary/Secondary Elementary/Secondary Elementary	Science Science Science Science	NB PEI MB ON
<b>Human Impact on Biodiversity</b>			
Biodiversity threats	Elementary/Secondary Secondary Secondary Elementary/Secondary Elementary/Secondary Elementary/Secondary Elementary/Secondary	Science, Social Studies Science & Technology Science Science Science Science Science	AB PQ NL BC, YK NB PEI MB ON
Habitat Loss and fragmentation	Elementary Secondary Elementary/Secondary Elementary/Secondary Secondary Elementary/Secondary Elementary/Secondary Elementary Elementary/Secondary	Science, Social Studies Science & Technology Science Science Science Science Science Science Science	AB PQ NWT NL BC, YK NB PEI MB ON
Invasive Species	Elementary/Secondary Secondary Elementary Elementary/Secondary Secondary Elementary Secondary Secondary Elementary	Science Science & Technology Science Science Science Science Science Science Science & Technology	AB PQ NWT NL BC, YK NB PEI MB ON
Human Population	Elementary/Secondary Secondary Elementary/Secondary Secondary Secondary Elementary/Secondary Secondary Secondary Secondary	Science Science & Technology Science Science, Geography Science Science Science Science Geography	AB PQ NWT NL BC, YK NB PEI MB ON
Pollution	Elementary Secondary Elementary/Secondary Elementary/Secondary	Science, Social Studies Science & Technology Science Science	AB PQ NWT NL

Topics/Concepts	Grade Level [Elementary: K-8, Secondary 9-12]	Subject	Notes
	Secondary Elementary Elementary/Secondary Elementary/Secondary Secondary	Science Science Science Science Science	BC, YK NB PEI MB ON
Overconsumption/ Unsustainable Use	Secondary Secondary Elementary Elementary/Secondary Secondary Elementary/Secondary Secondary Elementary/Secondary Secondary	Social Studies Science & Technology Science Science, Geography Science Science Science Science, Social Studies Science, Geography	AB PQ NWT NL BC, YK NB PEI MB ON
Climate change	Elementary/Secondary Secondary Elementary/Secondary Elementary/Secondary Secondary Elementary/Secondary Secondary Elementary/Secondary Secondary	Science, Social Studies Science & Technology Science Science Science Science Science, Global Studies Science Science	AB PQ NWT NL BC, YK NB PEI MB ON
Endangered species/ at risk species	Secondary Secondary Elementary/Secondary Elementary/Secondary Elementary/Secondary Secondary Elementary Secondary	Science Science & Technology Science & Technology Science Science Science Science Science	AB PQ NWT NL NB PEI MB ON
Species extinction	Elementary/Secondary Secondary Elementary/Secondary Elementary/Secondary Elementary Elementary/Secondary Elementary/Secondary Secondary	Science Science & Technology Science Science Science Science Science Science	AB PQ NWT NL NB PEI MB ON
Personal conservation activities	Elementary/Secondary	Science, Social Studies	AB

Topics/Concepts	Grade Level [Elementary: K-8, Secondary 9-12]	Subject	Notes
	Elementary/Secondary Secondary Elementary/Secondary Elementary/Secondary Elementary/Secondary	Science Science Science Science Science, Social Studies	NL BC, YK NB PEI MB
Stewardship	Elementary/Secondary  Elementary/Secondary  Elementary/Secondary Secondary Elementary/Secondary Elementary/Secondary Elementary/Secondary Elementary	Science, Social Studies, Career & Technology Studies  Dene Kede <sup>1</sup> , Experiential Science  Science Science Science Science Science Science & Technology	AB  NWT  NL BC, YK NB PEI MB ON
Sustainability	Elementary/Secondary  Elementary/Secondary Secondary Elementary/Secondary  Elementary/Secondary Elementary/Secondary Elementary/Secondary	Science, Social Studies, Career & Technology Studies  Science, Geography Science Science, Physical Education  Science Science, Social Studies Science	AB  NL BC, YK NB  PEI MB ON
Other (please specify):			
<b>Economic and Technological Utility and Impact of Biodiversity</b>			
Value of nature	Elementary/Secondary Secondary Elementary/Secondary  Elementary/Secondary Elementary/Secondary Elementary	Science, Social Studies Science Science, Physical Education  Science Science, Social Studies Science & Technology	AB NL NB  PEI MB ON

<sup>1</sup> Dene Kede: NWT curriculum developed for Dene First Nations, K-6.

Topics/Concepts	Grade Level [Elementary: K-8, Secondary 9-12]	Subject	Notes
Ecosystem services	Elementary/Secondary Secondary Secondary Elementary Elementary	Social Studies Science, Geography Science Science, Social Studies Science & Technology	AB NL BC, YK MB ON
Natural capital	Secondary  Secondary Elementary/Secondary Elementary/Secondary	Science, Career & Technology Studies Science, Geography Science Science, Social Studies	AB NL PEI MB
Other (please specify):			
<b>Socio-cultural perspectives and the role of government</b>			
Intrinsic or inherent value of nature	Elementary Secondary Elementary/Secondary  Elementary/Secondary Elementary/Secondary Elementary	Social Studies Science Science, Physical Education Science Science, Social Studies Science & Technology	AB NL NB  PEI MB ON
Cultural/aesthetic perspectives	Elementary/Secondary Secondary Secondary Elementary/Secondary Elementary/Secondary Elementary	Science, Social Studies Science, NL Studies Science Science Science, Social Studies Science & Technology	AB NL NB PEI MB ON
Decision making and governance related to biodiversity	Elementary/Secondary Secondary  Elementary/Secondary Elementary/Secondary Elementary/Secondary Elementary/Secondary Elementary	Science, Social Studies Science, Experiential Science Science, Social Studies Science Science Science/Social Studies Science & Technology	AB NWT  NL NB PEI MB ON
Conservation and Protection	Elementary Secondary  Elementary/Secondary Elementary/Secondary	Science, Social Studies Science, Experiential Science Science Science	AB NWT  NL NB

Topics/Concepts	Grade Level [Elementary: K-8, Secondary 9-12]	Subject	Notes
	Elementary/Secondary	Science	PEI
	Elementary/Secondary	Science, Social Studies	MB
	Elementary	Science & Technology	ON
Other (please specify):			

\*Science as subject matter may include courses in biology, agricultural science and environmental science

**3. In your province or territory, are there policies or guidelines in place addressing:**

Province/ Territory	Environmental Education	Outdoor and Experiential Learning
BC	No	No
AB	Yes	Yes
SK	--	--
MB	No	No
Yukon	No	No
NWT	?	?
Nunavut	--	--
ON	Yes	Yes
PQ	No	No
NB	Yes	Yes
NS	--	--
PEI	No	No
NL	No	No