

The Scientific Value of BC Protected-Area (PA) Designations to Some Conservation Biology Principles, Listed By Decreasing Value^λ

Protected Area Type (PA)	Roads	Log-ging	De-vel-op-ment	Re-placed If Lost	Strength of Legis-lation	Own Staff-ed Min-istry 1 PT; Own Act 2 PTS	Ability to Am- end Bound-ary	Ability to En- force Re- strict-ions	Hunt- ing or Trap- ping	Mo- tor- ized Recreation	Other Recre- ation	IUCN PA De- fini- tions	Sci- en- tific Value λ
Eco- Reserve	No	No*	No*	No	Tested*	MOE*	No	Yes*	No*	No*	Ltd	Ia*	18
National Park	Ltd	Ltd	Ltd	No	Tested*	CAN*	No	Yes*	No*	Ltd	Ltd	II	14
Provincial Park	Ltd	Ltd	Ltd	No	Tested*	MOE*	No	Yes*	Ltd	Ltd	Ltd	II	13
Caribou High	No (with- in 2 Km)*	No*	No*	No	Untested	MOE	No	Yes	Yes	Ltd	Ltd	Ia*	10
OGMA	Ltd	No*	No*	Yes*	Untested	ILMB	No	Yes	Yes	Yes*	Yes	Ia*	7
NEA, RCMA, WHE, WHMA, WMA, Etc.	Ltd	Ltd	Ltd	No	Untested	MOE	Yes	No	Yes	Yes*	Yes	IV	-3
FSC	Ltd	Ltd	Ltd	No	None*	None*	Yes*	No*	Yes	Yes*	Yes	VI*	-12

^λThe Scientific Value to Conservation Biology of each Protected Area Type was ranked for each element as: Good = 1 point (PT), Bad = -1 point; types of protection more explicitly important to Conservation Biology were given a weighted* Scientific Value of Good = 2 points (PTS); and types more explicitly deficient where given a weighted* Bad = -2 points. For example, unlimited motorized recreation was given a weighted* Scientific Value of -2 points, whereas other recreation received -1 point. Conservation Biology principles, scientific articles, legislated orders, white papers, and comments from Inland Rainforest conservation organizations were used to determine the value of each element. The sum of elements for each row became the Scientific Value for each Protected Area Type, since λ is a column eigenvector of the matrix, allowing the deductive logic of mathematics to define Scientific Value on a number line ordination.

Definitions: FSC = BC Forest Stewardship Council Certified Area; NEA = Natural Environment Area; OGMA = Old Growth Management Area (Spatially Designated); RCMA = Recreation and Conservation Management Area; WHE = Wildlife Habitat Enhancement Area; WHMA = Wildlife Habitat Management Area; WMA = Wildlife Management Area; Ltd = Limited or Restricted; * = + or - 2 points weighting. IUCN Protected Area Definitions after Chape et al. 2005 = Category Ia Strict nature reserve; Ib Wilderness area; Category II National park; III Natural monument; IV Habitat/species management area through management intervention; V & VI Managed resource protected area.

Some Other Conservation Biology Principles For The Inland Rainforest

- 1) "Flagship Special Element" the Antique Rainforest, older than old growth and ancient forests, being in place without stand-initiating events since glaciation. It is found nowhere else in the world. The Western red-cedar, living up to 1500 years old and growing 15 feet wide, qualifies as a "Keystone Species" within this Rainforest since it is the species that most Rainforest species depend on.
- 2) "Flagship Focal Species" the Chinook salmon are the longest-migrating and largest-bodied Chinook in BC. The species is presently being extirpated, yet they provide nutrients and energy to Rainforest headwater ecosystems that are not available to the Rainforest by any other means.
- 3) Grizzly Bear qualifies as an "Umbrella Species" since their range overlaps the ranges of many, many species within the Rainforest.
- 4) Grizzly Bear, Bull Trout, Mountain Caribou, and Wolverine are endangered, threatened, or sensitive "Focal Species". Most of the total range for the vanishing Mountain Caribou is in the Inland Rainforest Region and the species is an "Indicator Species" for old forests.