

Northern migration Change in Landscape Metrics from Development Relative to Pristine and 2007 Baseline Conditions for the Bathurst Herd

Habitat	Total Area		Number of Patches		Total Edge		Mean Area of Patch		Coefficient of Variation for Patch Area		Mean Distance to Nearest Neighbour	
	Baseline	Application	Baseline	Application	Baseline	Application	Baseline	Application	Baseline	Application	Baseline	Application
Esker	-148.0	-12.0	-28.0	-3.0	-27200.0	-2400.0	0.0	0.0	0.0	0.0	5.6	0.8
Lichen veneer	-2060.0	0.0	2.0	0.0	12000.0	0.0	-62.1	0.0	1.5	0.0	-107.1	0.0
Rock association	-19876.0	-1380.0	30.0	24.0	211400.0	103200.0	-94.8	-62.5	8.4	4.4	-52.2	-41.3
Heath tundra	-30588.0	-3940.0	33.0	45.0	346400.0	320000.0	-429.4	-483.9	35.9	-397.6	-66.5	-75.9
Heath rock	-5452.0	-20.0	13.0	0.0	-11200.0	-400.0	-29.2	0.0	4.4	0.0	-35.6	0.0
Sedge association	-576.0	-56.0	5.0	2.0	-4400.0	4000.0	-25.8	-8.9	3.4	1.1	-668.0	-65.3
Riparian shrub	-2224.0	-504.0	6.0	10.0	-20000.0	43200.0	-10.4	-12.8	1.1	0.8	-37.0	-56.8
Low shrub	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Forest	-20948.0	-3588.0	27.0	43.0	229800.0	295600.0	-195.7	-261.3	32.8	-68.9	-25.3	-66.1
Young burn	-1724.0	-232.0	4.0	2.0	10000.0	16400.0	-73.2	-32.4	3.3	0.9	-362.5	-38.3
Old burn	-352.0	-512.0	1.0	6.0	2800.0	41400.0	-9.0	-44.5	0.9	-6.3	-37.3	-223.1
Nonvegetated	-19112.0	-640.0	9.0	8.0	249400.0	42400.0	-87.8	-55.0	3.8	1.9	-48.5	-49.1

Note: Baseline = relative change from Pristine to 2007 Baseline; Application = relative change from 2007 Baseline to Application Conditions.

Post-calving Change in Landscape Metrics from Development Relative to Pristine and Baseline Conditions for the Bathurst Herd

Habitat	Total Area		Number of Patches		Total Edge		Mean Area of Patch		Coefficient of Variation for Patch Area		Mean Distance to Nearest Neighbour	
	Baseline	Application	Baseline	Application	Baseline	Application	Baseline	Application	Baseline	Application	Baseline	Application
Esker	-132.0	-12.0	-24.0	-3.0	-24000.0	-2400.0	0.0	0.0	-0.1	0.0	5.4	1.5
Lichen veneer	-532.0	0.0	1.0	0.0	400.0	0.0	-37.7	0.0	0.9	0.0	-231.7	0.0
Rock association	-15752.0	-1224.0	24.0	19.0	197800.0	94400.0	-132.8	-84.3	10.6	5.1	-59.5	-76.2
Heath tundra	-27740.0	-3940.0	29.0	46.0	313600.0	320000.0	-809.6	-1019.4	46.3	-317.2	-54.1	-83.3
Heath rock	-4176.0	-20.0	13.0	0.0	-25400.0	-400.0	-42.6	0.0	7.8	0.0	-54.8	0.0
Sedge association	-488.0	-56.0	4.0	2.0	-3600.0	4000.0	-19.5	-8.5	2.5	1.0	-61.7	-43.9
Riparian shrub	-1120.0	-476.0	3.0	8.0	-15600.0	41200.0	-9.2	-18.1	1.1	0.9	-24.2	-64.6
Low shrub	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Forest	-8592.0	-1844.0	24.0	34.0	24800.0	140800.0	-99.7	-114.8	12.4	13.8	-33.8	-85.1
Young burn	-200.0	0.0	2.0	0.0	1600.0	0.0	-283.2	0.0	20.3	0.0	-5684.7	0.0
Old burn	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nonvegetated	-12216.0	-564.0	4.0	6.0	193400.0	38000.0	-152.8	-152.7	2.4	2.1	-63.1	-126.6

Note: Baseline = relative change from Pristine to 2007 Baseline conditions; Application = relative change from 2007 Baseline to Application Conditions.

Rut Change in Landscape Metrics from Development Relative to Pristine and 2007 Baseline Conditions for the Bathurst Herd

Habitat	Total Area		Number of Patches		Total Edge		Mean Area of Patch		Coefficient of Variation for Patch Area		Mean Distance to Nearest Neighbour	
	Baseline	Application	Baseline	Application	Baseline	Application	Baseline	Application	Baseline	Application	Baseline	Application
Esker	-136.0	-12.0	-25.0	-3.0	-24800.0	-2400.0	0.0	0.0	0.0	0.0	6.9	1.1
Lichen veneer	-1640.0	0.0	1.0	0.0	10000.0	0.0	-95.5	0.0	3.3	0.0	-211.0	0.0
Rock association	-16468.0	-1380.0	25.0	24.0	150000.0	103200.0	-84.8	-64.3	8.0	2.7	-54.6	-55.2
Heath tundra	-28936.0	-3940.0	34.0	45.0	329400.0	320000.0	-447.1	-483.0	30.7	-370.0	-72.9	-79.9
Heath rock	-3748.0	-20.0	12.0	0.0	-24000.0	-400.0	-40.7	0.0	3.9	0.0	-59.4	0.0
Sedge association	-500.0	-56.0	5.0	2.0	-4400.0	4000.0	-19.4	-7.0	2.4	0.8	-426.8	-34.3
Riparian shrub	-2948.0	-504.0	9.0	10.0	-16000.0	43200.0	-16.6	-14.6	2.0	1.6	-38.7	-45.2
Low shrub	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Forest	-25924.0	-3424.0	31.0	40.0	298800.0	283600.0	-264.8	-283.1	42.3	-135.9	-25.0	-63.3
Young burn	-2148.0	-232.0	5.0	2.0	6400.0	16400.0	-75.5	-25.4	3.3	0.6	-382.3	-41.8
Old burn	-384.0	-312.0	1.0	4.0	2000.0	23400.0	-14.9	-48.4	1.4	1.7	-72.8	-310.5
Nonvegetated	-19796.0	-640.0	8.0	8.0	262200.0	42400.0	-88.8	-57.7	3.6	1.8	-37.2	-56.2

Note: Baseline = relative change from Pristine to 2007 Baseline Conditions; Application = relative change from 2007 Baseline to Application Conditions.

Winter Period Change in Landscape Metrics from Development ^a Relative to Pristine and 2007 Baseline Conditions ^a for the Bathurst Herd

Habitat	Total Area		Number of Patches		Total Edge		Mean Area of Patch		Coefficient of Variation for Patch Area		Mean Distance to Nearest Neighbour	
	Baseline	Application	Baseline	Application	Baseline	Application	Baseline	Application	Baseline	Application	Baseline	Application
Esker	-72.0	-4.0	-13.0	-1.0	-13200.0	-800.0	0.0	0.0	0.0	0.0	5.1	0.4
Lichen veneer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rock association	-11740.0	-1028.0	48.0	17.0	71200.0	77600.0	-125.3	-38.4	-5.4	-2.8	-160.1	-37.8
Heath tundra	-12092.0	-2152.0	27.0	30.0	207800.0	164000.0	-290.0	-270.1	15.8	-37.7	-182.2	-113.2
Heath rock	-96.0	0.0	0.0	0.0	-1600.0	0.0	-0.9	0.0	0.2	0.0	6.4	0.0
Sedge association	-96.0	0.0	1.0	0.0	-800.0	0.0	-7.5	0.0	0.9	0.0	-824.0	0.0
Riparian shrub	-4124.0	-1372.0	35.0	16.0	54800.0	105200.0	-47.2	-20.3	5.6	-8.1	-97.8	-30.1
Low shrub	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Forest	-52384.0	-4192.0	100.0	45.0	1754800.0	344400.0	-1347.0	-504.0	-1077.8	-12.7	-86.6	-40.2
Young burn	-4656.0	-1784.0	26.0	18.0	119200.0	151200.0	-246.8	-151.5	13.3	-2.5	-271.1	-155.5
Old burn	-1048.0	-1012.0	7.0	16.0	5600.0	71600.0	-21.5	-44.7	1.9	0.2	-50.9	-137.0
Nonvegetated	-36828.0	-4308.0	116.0	36.0	1761400.0	387400.0	-461.0	-119.3	32.3	10.2	-259.8	-81.8

Note: Baseline = relative change from Pristine to 2007 Baseline Conditions; Application = relative change from 2007 Baseline to Application Conditions.

^a Application and 2007 Baseline for winter fragmentation analysis include winter access, the Tibbitt-to-Contwoyto winter road, and the Twin Gorges to Nonacho Road