

ATTACHMENT B

**POTENTIAL AND OBSERVED SPECIES OF SPECIAL CONCERN
AND INCIDENTAL OBSERVATIONS**

Table B-1 Potential and Observed Wildlife Species of Special Concern Within the Local Study Area

Species	Scientific Name	National Status [COSEWIC 2007]	Provincial Listing [ASRD 2005]	CEMA Status [CEMA 2001]	Observed During Field Surveys	Habitat Requirements ^(a)
Mammals						
Chiroptera						
northern long-eared bat	<i>Myotis septentrionalis</i>	n/a	may be at risk	n/a	no	southern end of range; mixed and coniferous forests; hibernate in caves
hoary bat	<i>Lasiurus cinereus</i>	n/a	sensitive	n/a	yes	found throughout most of the country, typically roost in trees along forest borders
red bat	<i>Lasiurus borealis</i>	n/a	sensitive	n/a	yes	prefer forested environments, forage in a variety of habitats, mostly over land, along the edges of pastures, crop lands or other openings dotted with large deciduous trees
silver-haired bat	<i>Lasionycteris noctivagans</i>	n/a	sensitive	n/a	yes	in forested areas of America, most closely associated with coniferous or mixed coniferous and deciduous forest types, especially in areas of old growth
Castoridae						
beaver	<i>Castor canadensis</i>	n/a	secure	priority 2	yes	requires water; sloughs, rivers, creeks and lakes with trees within easy access
Cricetidae						
muskrat	<i>Ondatra zibethicus</i>	n/a	secure	priority 1	yes	sloughs, lakes, marshes, streams
Carnivora						
black bear	<i>Ursus americanus</i>	n/a	secure	priority 2	yes	coniferous and mixed forests
fisher	<i>Martes pennanti</i>	n/a	sensitive	priority 1	yes	dense coniferous forest
river otter	<i>Lutra canadensis</i>	n/a	secure	priority 2	yes	creeks, rivers, ponds, lakes
wolverine	<i>Gulo gulo</i>	special concern	may be at risk	n/a	yes	dense forests
Canada lynx	<i>Lynx canadensis</i>	n/a	sensitive	priority 2	yes	coniferous and mixedwood forest
Artiodactyla						
moose	<i>Alces alces</i>	n/a	secure	priority 1	yes	mixedwood, around edges of lakes, bogs and streams
woodland caribou	<i>Rangifer tarandus</i>	threatened	at risk	priority 1	yes	black spruce bogs and fens, upland jackpine forest

Table B-1 Potential and Observed Wildlife Species of Special Concern Within the Local Study Area (continued)

Species	Scientific Name	National Status [COSEWIC 2007]	Provincial Listing [ASRD 2005]	CEMA Status [CEMA 2001]	Observed During Field Surveys	Habitat Requirements ^(a)
wood bison	<i>Bos bison athabascae</i>	n/a	at risk	n/a	no	boreal prairies
Amphibians And Reptiles						
Anura						
Canadian toad	<i>hemiphrys</i>	n/a	may be at risk	priority 1	yes	margins of ponds, lakes and potholes
northern leopard frog	<i>Rana pipiens</i>	special concern	at risk	n/a	no	permanent ponds with emergent vegetation (cattails, bulrushes)
western (boreal) toad	<i>Bufo boreas</i>	special concern	sensitive	n/a	yes	ponds, streams or lakes; breeding ponds tend to be shallow with cool water (less than 10°C) and sandy bottoms
wood frog	<i>Rana sylvatica</i>	n/a	secure	priority 3	yes	damp, shady woods; in winter, hibernates on land beneath leaf litter
red-sided garter snake	<i>Thamnophis sirtalis</i>	n/a	sensitive	n/a	no	marshy areas; in winter, hibernates in crevices and caves
BIRDS						
Gaviformes						
common loon	<i>Gavia immer</i>	n/a	secure	priority 3	yes	clear open lake or large river with minimal shoreline development, little recreational activity and a abundance of small fish
Podicipediformes						
pied-billed grebe	<i>Podilymbus podiceps</i>	n/a	sensitive	n/a	no	pond, wetlands or prairie slough with shoreline or islands dense with emergent growth
horned grebe	<i>Podiceps auritus</i>	n/a	sensitive	n/a	no	open and forested areas, preferring ponds, sloughs and lakes with extensive marshy vegetation
red-necked grebe	<i>Podiceps grisegena</i>	n/a	secure	n/a	yes	small, shallow lakes 2 ha in size or in shallow protected bays of larger lakes
western grebe	<i>Aechmophorus occidentalis</i>	n/a	sensitive	n/a	no	large lakes with large amounts of emergent and floating vegetation

Table B-1 Potential and Observed Wildlife Species of Special Concern Within the Local Study Area (continued)

Species	Scientific Name	National Status [COSEWIC 2007]	Provincial Listing [ASRD 2005]	CEMA Status [CEMA 2001]	Observed During Field Surveys	Habitat Requirements ^(a)
Pelecaniformes						
American white pelican	<i>Pelecanus erythrorhynchos</i>	n/a	sensitive	n/a	yes	shallow, turbid lake remote from human activity with extensive shallow waters near shore and good rough fish populations
Ciconiiformes						
American bittern	<i>Botaurus lentiginosus</i>	n/a	sensitive	n/a	yes	marshes, swamps, moist meadows, wet alder or willow thickets; occasionally in drier meadows, but always in areas with dense growth of vegetation
great blue heron	<i>Ardea herodias</i>	n/a	sensitive	n/a	yes	areas with shallow, open water, swamps and mudflats
black-crowned night heron	<i>Nycticorax nycticorax</i>	n/a	sensitive	n/a	no	swamps, streams, rivers, ponds, lakes and areas with dense emergent vegetation
Anseriformes						
trumpeter swan	<i>Cygnus buccinator</i>	not at risk	at risk	n/a	no	small to medium size shallow lakes with well developed emergent and sub-emergent plant communities
white-winged scoter	<i>Melanitta fusca</i>	n/a	sensitive	n/a	no	near ponds, lakes, oxbows and sluggish streams in treeless or open country, with dense and low ground cover associated; undisturbed islands in deep water lakes
Anatiformes						
green-winged teal	<i>Anas crecca</i>	n/a	sensitive	n/a	yes	wetlands, beaver ponds, lakes
northern pintail	<i>Anas acuta</i>	n/a	sensitive	n/a	no	wetlands, beaver ponds, lakes
Falconiformes						
osprey	<i>Pandion haliaetus</i>	n/a	sensitive	n/a	yes	permanent lakes and rivers, where there is an adequate supply of fish
bald eagle	<i>Haliaeetus leucocephalus</i>	n/a	sensitive	priority 3	yes	proximity of a large body of water, usually an inland lake or river; breeding areas must have suitable tall trees near shore for nesting and roosting, good fish populations and relatively little human disturbance

Table B-1 Potential and Observed Wildlife Species of Special Concern Within the Local Study Area (continued)

Species	Scientific Name	National Status [COSEWIC 2007]	Provincial Listing [ASRD 2005]	CEMA Status [CEMA 2001]	Observed During Field Surveys	Habitat Requirements ^(a)
northern harrier	<i>Circus cyaneus</i>	n/a	sensitive	n/a	no	open country, including marshes, meadows and cultivated fields
northern goshawk	<i>Accipiter gentilis</i>	n/a	sensitive	priority 3	yes	forested habitats, usually in mature forests that are dense; sometimes in areas interspersed with clearings
broad-winged hawk	<i>Buteo platypterus</i>	n/a	sensitive	priority 3	no	in woodlands, generally near forest edge at clearings and wet areas
golden eagle	<i>Aquila chrysaetos</i>	n/a	sensitive	n/a	no	rocky outcrops, sparsely wooded slopes and grassland habitats with coulees, steep river banks and canyons
peregrine falcon	<i>Falco peregrinus</i>	threatened	at risk	n/a	no	cliffs near water for nesting and open fields, swamps and marshes for hunting
Galliformes						
ruffed grouse	<i>Bonasa umbellus</i>	n/a	secure	priority 2	yes	aspen-dominated and mixed wood forests; small openings in a deciduous forest are preferred; heavy understorey needed for drumming sites
sharp-tailed grouse	<i>Tympanuchus phasianellus</i>	n/a	sensitive	n/a	no	openings created by fire and man, muskegs and bogs
Gruiformes						
sora	<i>Porzana caroline</i>	n/a	sensitive	n/a	yes	wetlands and marshes
sandhill crane	<i>Grus canadensis</i>	n/a	sensitive	n/a	yes	marshes, bogs adjacent to ponds and large marshes with some open water and tall grasses and rushes
whooping crane	<i>Grus americana</i>	endangered	at risk	n/a	no	large, relatively open, marshy areas
Charadriiformes						
upland sandpiper	<i>Bartramia longicauda</i>	n/a	sensitive	n/a	no	open, grassy uplands, wet meadows, old fields with minimal tree or shrub growth
Caspian tern	<i>Sterna caspia</i>	n/a	sensitive	n/a	no	large lakes rich with small fish
black tern	<i>Chlidonias niger</i>	n/a	sensitive	n/a	yes	shallow lakes, marshes, sloughs, ponds and wet meadows, where there are extensive shallows and moderate amounts of emergent vegetation

Table B-1 Potential and Observed Wildlife Species of Special Concern Within the Local Study Area (continued)

Species	Scientific Name	National Status [COSEWIC 2007]	Provincial Listing [ASRD 2005]	CEMA Status [CEMA 2001]	Observed During Field Surveys	Habitat Requirements ^(a)
Forster's tern	<i>Sterna forsteri</i>	data deficient	sensitive	n/a	no	cattail marshes and back waters. small lakes with floating or emergent vegetation
Strigiformes						
barred owl	<i>Strix varia</i>	n/a	sensitive	n/a	yes	mixedwoods with large deciduous trees, particularly along lakeshores and stream valleys; breeding habitat must have densely foliated trees for roosting and large trees with suitable cavities for nesting
great gray owl	<i>Strix nebulosa</i>	n/a	sensitive	n/a	yes	coniferous, deciduous and mixedwood areas, usually near water sources such as muskegs, marshes and wet meadows
short-eared owl	<i>Asio flammeus</i>	special concern	may be at risk	n/a	no	open country, including grassland, grassy or brushy meadows, marshland, pastures and previously forested areas that have been cleared
boreal owl	<i>Aegolius funereus</i>	n/a	secure	priority 2	yes	coniferous and mixedwood forests
Caprimulgiformes						
common nighthawk	<i>Chordeiles minor</i>	n/a	sensitive	n/a	yes	open or semi-open habitats in a variety of areas; forest clearings, burnt-over areas, gravel pits, barren rock and beaches
Piciformes						
black-backed woodpecker	<i>Picoides arcticus</i>	n/a	sensitive	n/a	yes	dense mixed or coniferous forests, often in openings such as bogs, swamps and lakeshores
pileated woodpecker	<i>Drycopus pileatus</i>	n/a	sensitive	priority 2	yes	older, mature dense-canopied forest, particularly mixed and deciduous woods with large dead and dying trees for nesting and downed woody material for feeding
Passeriformes						
great-crested flycatcher	<i>Myiarchus crinitus</i>	n/a	sensitive	n/a	no	deciduous and mixedwood forests near clearings
sedge wren	<i>Cistothorus plantensis</i>	n/a	sensitive	n/a	no	sedge meadows and grassy fields

Table B-1 Potential and Observed Wildlife Species of Special Concern Within the Local Study Area (continued)

Species	Scientific Name	National Status [COSEWIC 2007]	Provincial Listing [ASRD 2005]	CEMA Status [CEMA 2001]	Observed During Field Surveys	Habitat Requirements ^(a)
Cape May warbler	<i>Dendroica tigrina</i>	n/a	sensitive	n/a	yes	dense mature white spruce stands of coniferous and mixedwood forests
black-throated green warbler	<i>Dendroica virens</i>	n/a	sensitive	n/a	no	mature coniferous or mixedwood forest with large stands of white spruce
blackburnian warbler	<i>Dendroica fusca</i>	n/a	sensitive	n/a	no	mature coniferous or mixedwood forest containing coniferous trees (white spruce)
bay-breasted warbler	<i>Dendroica castanea</i>	n/a	sensitive	n/a	no	extensive stands of spruce, also mixed stands of spruce, jack pine and tamarack
Canada warbler	<i>Wilsonia canadensis</i>	n/a	sensitive	n/a	no	thick stands of willow and alder along streams and dense shrubs and bushes in swamps near the forest edge
western tanager	<i>Piranga ludoviciana</i>	n/a	sensitive	n/a	no	open coniferous and mixedwood forests
common yellowthroat	<i>Geothlypis trichas</i>	n/a	sensitive	n/a	yes	marshes, streamside thickets, wet meadows and other wetlands
eastern phoebe	<i>Sayornis phoebe</i>	n/a	sensitive	n/a	yes	woodland and edge habitats near water
Bird Communities of Concern						
old growth bird community	n/a	n/a	n/a	priority 1	n/a	n/a
ducks and geese	n/a	n/a	n/a	priority 2	n/a	n/a
mixedwood forest bird community	n/a	n/a	n/a	priority 2	n/a	n/a

^(a) Source: Canadian Natural 2002; Ehrlich et al. 1988; Godfrey 1986; Russell and Bauer 1993; Semenchuk 1992; Smith 1993.

n/a = Not available.

Table B-2 Incidental Wildlife Sightings

Species	Number	Alberta Status ^(a)	Federal Status ^(b)	CEMA Priority ^(c)	Type of Observation	Habitat ^(d)
Birds						
American bittern	1	sensitive	not listed	n/a	visual	lake shore
American kestrel	1	secure	not listed	n/a	visual	near stream
bald eagle	11	sensitive	not at risk	priority 3	nest, visual	lake (Christina Lake north shore)
barred owl	1	sensitive	not listed	n/a	call	e3
black-backed woodpecker	1	sensitive	not listed	n/a	visual (feeding)	d1
black-capped chickadee	1	secure	not listed	n/a	call	MONS
blue-winged teal	5	secure	not listed	n/a	visual	stream
blue jay	1	n/a	not listed	n/a	flyover	stream
boreal chickadee	2	secure	not listed	n/a	call	g1, FTNN
Canada goose	134	secure	not listed	n/a	flyover	lake, WONN
chipping sparrow	4	secure	not listed	n/a	song	g1, FTNN, c1, BTNN
common goldeneye	6	secure	not listed	n/a	visual	lake
common loon	5	secure	not at risk	priority 3	visual, call, nest	lake, stream
common nighthawk	1	sensitive	not listed	n/a	call	MONS/c1(burn)
common raven	7	secure	not listed	n/a	call	d2, BTNN, stream edge
common redpoll	4	secure	not listed	n/a	visual	FTNN
common tern	1	secure	not at risk	n/a	visual	lake
common yellowthroat	1	secure	not listed	n/a	song	FTNN
dark-eyed junco	8	secure	not listed	n/a	call	FTNN, g1, BTNN, c1
falcon spp.	2	n/a	n/a	n/a	visual, flyover	stream
gray jay	7+	secure	not listed	n/a	visual, call	MONS, d2, g1, FTNN, BTNN
great gray owl	5	sensitive	not at risk	n/a	call	d2 (3), FONS, burn
greater yellowlegs	1	secure	not listed	n/a	call	pond
great horned owl	2	secure	not listed	n/a	call	FTNN, a1
green-winged teal	1	secure	not listed	n/a	visual	stream
grouse spp.	2	n/a	n/a	n/a	tracks, pellets	d2, BTNN
hermit thrush	8	secure	n/a	n/a	call,	FTNN, g1, a1, burn, BTNN
lapland longspur	4	secure	not listed	n/a	visual	cutline
Le Conte's sparrow	3	secure	not listed	n/a	song	MONS,
chipping sparrow	4	secure	not listed	n/a	song	BTNN, g1, c1, FTNN
common raven	3	secure	not listed	n/a	call	d2, BTNN
common yellowthroat	1	sensitive	not listed	n/a	song	FTNN
dark-eyed junco	5	secure	not listed	n/a	song	c1, g1, BTNN, FTNN
gray jay	6	secure	not listed	n/a	song, call	d2, g1, BTNN, FTNN
hermit thrush	1	secure	not listed	n/a	song	FTNN

Table B-2 Incidental Wildlife Sightings (continued)

Species	Number	Alberta Status ^(a)	Federal Status ^(b)	CEMA Priority ^(c)	Type of Observation	Habitat ^(d)
Lincoln's sparrow	2	secure	not listed	n/a	song	FTNN, BTNN
lesser yellowlegs	2	secure	not listed	n/a	visual, call	FTNN, cutline
mallard	10	secure	not listed	n/a	visual	stream (MONG), lake
mourning warbler	1	secure	not listed	n/a	song	c1,
northern harrier	3	secure	not at risk	n/a	visual	FTNN, MONS
northern waterthrush	1	secure	not listed	n/a	song	d2
osprey	2	sensitive	not listed	n/a	visual	lake (Christina Lake north shore)
ovenbird	8	secure	not listed	n/a	song	d2
owl spp.	2	n/a	n/a	n/a	plunge, flyover	FTNN, WONN
palm warbler	2	secure	not listed	n/a	song,	c1, FTNN
pileated woodpecker	1	sensitive	not listed	priority 2	flyover	d3
pine siskin	5	secure	not listed	n/a	flyover	BTNN, FTNN
raptor spp.	2	n/a	n/a	n/a	flyover	WONN
redhead	2	secure	not listed	n/a	visual	stream
red-breasted nuthatch	4	secure	not listed	n/a	song	d3, d2
red-eyed vireo	2	secure	not listed	n/a	song	d2
red-necked grebe	7	secure	not at risk	n/a	visual, call, nest	lake
red-tailed hawk	5	secure	not at risk	n/a	visual, flyover	d2, FTNN, WONN
ruby-crowned kinglet	32	secure	not listed	n/a	call, song	BTNN, c1, d2, FTNN, g1
ruffed grouse	7	secure	not listed	priority 2	drumming, feeding on cutline	d2, cutline, BTNN
sandhill crane	1	sensitive	not listed	n/a	flyover	c1
snow bunting	8	secure	not listed	n/a	flyover	FTNN
solitary sandpiper	1	secure	not listed	n/a	visual	cutline
sora	1	secure	not listed	n/a	call	WONN
spruce grouse	2	secure	not listed	n/a	visual (courtship)	g1, cutline
stick nest	1	n/a	n/a	n/a	visual	b2
Swainson's thrush	12	secure	not listed	n/a	song	d2, c1, FTNN
Tennessee warbler	4	secure	not listed	n/a	song	BTNN, FTNN, d2
white-throated sparrow	3	secure	not listed	n/a	song	burn (g1), FTNN, BTNN
white-winged crossbill	33	secure	not listed	n/a	visual, flyover, call	d3, FTNN, d2, c1, g1, BTNN
Wilson's snipe	13	secure	not listed	n/a	call, flyover	FTNN, MONG, c1, d2, BTNN
Wilson's warbler	1	secure	not listed	n/a	song	FTNN
woodpecker spp.	2	n/a	n/a	n/a	call, feeding	BTNN
yellow-bellied sapsucker	1	secure	not listed	n/a	call	d3
yellow-rumped warbler	5	secure	not listed	n/a	song	d2, FTNN

Table B-2 Incidental Wildlife Sightings (continued)

Species	Number	Alberta Status ^(a)	Federal Status ^(b)	CEMA Priority ^(c)	Type of Observation	Habitat ^(d)
Mammals						
bat spp.	1	n/a	n/a	n/a	flyover	cutline
beaver	8	secure	not listed	priority 2	lodge, visual	WONN, lake, stream
black bear	8	secure	not at risk	priority 2	marking, scat, visual, tracks	d2, cutline, road, clearing
Canada lynx	4	sensitive	not at risk	priority 1	tracks	c1, b2, BTNN
cougar	2 families	secure	not listed	n/a	visual	Near Conklin
coyote	13	secure	not listed	n/a	tracks, call, remains, visual	BTNN, g1, surrounding lake (FTNN), cutline, WONN
deer spp.	5	n/a	n/a	n/a	tracks, visual	c1, g1, d2, cutline
gray wolf	9	secure	not at risk	priority 3	tracks, call, scat	BTNN, cutline, FONS surrounding lake, c1
moose	16	secure	not listed	priority 1	tracks, pellets, visual	BTNN, d2, cutline, FTNN, g1, e2, c1, MONS
red squirrel	4	secure	not listed	n/a	visual (midden), auditory	c1, d2
river otter	2	secure	not listed	priority 2	visual, tracks	MONS (stream)
snowshoe hare	3	secure	not listed	priority 1	visual, pellets	cutline, c1
vole spp.	1	n/a	n/a	n/a	visual	
white-tailed deer	1	secure	not listed	n/a	visual	d2
woodland caribou	2	at risk	threatened	priority 1	tracks, visual	g1, cutline
Amphibians						
boreal chorus frog	10+	secure	not at risk	n/a	call	FTNN, SONS
wood frog	15	secure	not listed	priority 3	call, visual	MONS, FTNN, SONS, ditch
western (boreal) toad	6	sensitive	special concern	n/a	visual, call	cutline, g1
Canadian toad	1	may be at risk	not at risk	priority 1	call	FTNN

^(a) ASRD 2001.

^(b) COSEWIC 2004.

^(c) CEMA 2001 with updates from Westworth 2002.

^(d) Beckingham and Archibald 1996; Vitt et al. 1997.

n/a = Not available.

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