

Kitwanga Fort National Historic Site

Inventory of Species at Risk and Survey of Other Breeding Bird Species
June 10, 2002

Report Prepared for

Ecosystem Services, Western Canada Service Centre
Parks Canada
Vancouver, BC

by

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Listed Species

The site was surveyed for the presence of the following species listed as being at risk for the Kitwanga area and for the Kispiox Forest District. These are:

COSEWIC list

Pacific Great Blue Heron

Western Screech Owl

B.C. Conservation Data Centre list

American Bittern

Trumpeter Swan

Bald Eagle

Swainson's Hawk

Peregrine Falcon *anatum* subspecies

Short-eared Owl

None of these species were observed on the site at the time of the survey. The habitat was evaluated for suitability for these species using published reports of habitat requirements and my own prior knowledge. Past reports of the presence of these species was researched by contacting local birders, checking published records (Campbell et al 1990-2002) and the British Columbia Conservation Data Centre's provincial database. The Conservation Data center reported that there were "no rare plant or animal occurrences mapped in the CDC database for this site" but that "the scarcity of records may reflect a lack of inventory work in the area" (CDC, email, June 24, 2002).

Pacific Great Blue Heron (*Ardea herodias*)

Great Blue Heron's (probably Interior Great Blue's) have been seen occasionally inland as far as the Bulkley Valley at various times of the year. It is possible that individuals of this species might be found feeding along the stretch of the Kitwanga River that flows through the site, but it is unlikely to be the Pacific form. There are no reports of breeding in the area.

Western Screech Owl (*Otus kennicottii*)

There is some suitable habitat i.e. large cottonwoods in the riparian forest along both sides of the Kitwanga River. Local birders surveyed for the presence of Western Screech Owls on the Kitwanga backroad by using taped calls, but there was no response (Ray Sturney, pers. Comm., June 12, 2002). Western Screech Owls have been recorded in Terrace (Campbell et al 1990).

American Bittern (*Botaurus lentiginosus*)

It is highly unlikely that this species would ever be observed at the site due to lack of suitable habitat (i.e. cat-tail marsh wetlands) at this site.

Trumpeter Swan (*Cygnus buccinator*)

It is unlikely that this species would be observed at the site due to lack of suitable habitat, although Trumpeter Swans do migrate through the area.

Bald Eagle (*Haliaeetus leucocephalus*)

It is highly probable that the Bald Eagle would be found using this stretch of river for feeding when salmon are in the river. Large cottonwoods on both sides of the river are probably used as hunting and feeding perches and several are large enough to support nests. No nests were located on the east side of the river at this time. As far as I could see there were none on the west side either, but I did not go across the river.

Swainson's Hawk (*Buteo swainsoni*)

Due to lack of suitable habitat, it is unlikely that this species would be seen at this site. They are very uncommon in the area as a whole. This species has been reported in the Kispiox Valley (Frank Doyle – personal communication, June 18, 2002).

Peregrine Falcon (*anatum* subspecies) (*Falco peregrinus anatum*)

This species is unlikely to be in this area at all due to lack of suitable habitat.

Short-eared Owl (*Asio flammeus*)

Due to lack of suitable open habitat for foraging (open grasslands and agricultural fields) it is unlikely that this species uses this site. However, this site was more open in the past before the trees and shrubs started to invade the grassy flat areas.

Other Birds using the site

All birds seen and heard in the area were recorded over a 4 1/2 hour period from 4.30 a.m. until 9.00 a.m. Simultaneous singing by males or aggressive interactions by males was used to indicate territorial behaviour and, hence, potential for breeding on site. Birds thought to be possibly breeding are marked below with an asterisk. Only one active nest was located – that of an American Robin. An old, inactive nest (possibly American Crow or Common Raven) was also located in a young pine near the trail.

The area was divided up into different habitats based on the overall appearance of the vegetation. Each area described below has been assigned a number that is marked on the accompanying map.

“Battle Hill” South side and top – low shrub-herb community - Area 1

This is an area of low shrubs dominated by *Prunus virginiana*, *Amelanchier alnifolia*, *Rubus parviflorus*, *Symphoricarpos albus* and some *Populus tremuloides*. The herb layer is a mix of mainly *Lathyrus nevadensis*, *Lathyrus ochroleucus*, *Vicia americana*, *Epilobium angustifolium*, *Aster conspicuus*, *Aster ciliolatus*, *Thalictrum occidentale*, *Cerastium arvense*, *Galium boreale*, *Fragaria virginiana*, *Achillea millefolium*, *Smilacina stellata*, intermingled with large amounts of the introduced *Taraxacum officinale* and some *Rumex acetosella*. A small patch of the highly invasive weed St. John’s wort (*Hypericum perforatum*) was found on the top of the hill. (This is cause for concern as it will spread rapidly). *Antennaria microphylla* was locally abundant in more exposed, drier sites lacking shrubs. Also present were small patches of *Carex*

Birds observed or heard in this area were:

- *Lincoln’s Sparrow (*Melospiza lincolnii*)
- *Dark-eyed Junco (*Junco hyemalis*) – carrying food
- *MacGillivray’s Warbler (*Oporornis tolmiei*)
- *Orange-crowned Warbler (*Vermivora celata*)
- *Rufous Hummingbird (*Selasphorus rufus*) – aggression between two males

“Battle Hill” - East and North Sides of the Hill – taller shrub community – Area 2

This area is dominated by dense, taller shrubs – primarily *Corylus cornuta*, *Amelanchier alnifolia*, *Cornus stolonifera*, *Populus tremuloides*, *Betula papyrifera*, *Lonicera involucrata*, *Prunus virginiana*, *Symphoricarpos albus*, and *Rosa acicularis* with smaller amounts of *Rubus parviflorus* and *Sambucus racemosa*. At the toe of the slope on the north side the herb layer was well developed and contained *Fritillaria camchatcensis*, *Arnica cordifolia*, *Heracleum lanatum*, *Geum macrophyllum*, *Thalictrum occidentale*, *Epilobium angustifolium*, *Geranium* sp., together with some *Aquilegia formosa*, *Castilleja miniata*, *Viola canadensis*. The presence of *Equisetum* species, *Spiraea douglasii* and more *Lonicera involucrata* indicates a slightly wetter site.

Birds present were

- *Swainson’s Thrush (*Catharus ustulatus*)
- *American Robin (*Turdus migratorius*) – carrying food

- *Rufous Hummingbird (*Selasphorus rufus*) – aggression between males
- *Warbling Vireo (*Vireo gilvus*)
- *Lincoln's Sparrow (*Melospiza lincolnii*)
- *Yellow Warbler (*Dendroica petechia*)
- *MacGillivray's Warbler (*Oporornis tolmiei*)
- *Dusky Flycatcher (*Empidonax oberholseri*)

and

Wilson's Warbler (*Wilsonia pusilla*) - feeding

Northern Rough-winged Swallow (*Stelgidopteryx serripennis*) - feeding

Cooper's Hawk (*Accipiter cooperii*) chasing (hunting) a Swainson's Thrush

Flat grassy open area south of "Battle Hill" and down on the flat floodplain below – Area 3

This flat area is heavily disturbed and dominated by grasses (native and non-native) with *Potentilla arguta* and weedy (introduced) species such as *Chrysanthemum leucanthemum*, *Taraxacum officinale*, *Hieracium* sp., *Prunella vulgaris* and some burdock (*Arctium minus*) and clovers. Scattered in this area are a few young lodgepole pine, the occasional *Juniperus scopulorum*, and saplings of *Populus tremuloides*.

Bird species here were

- *Lincoln's Sparrow (*Melospiza lincolnii*)
- *Chipping Sparrow (*Spizella passerina*)
- *Dark-eyed Junco – a pair
- *American Robin (*Turdus migratorius*)
- Pine Siskin (*Carduelis pinus*) – feeding on dandelion seeds

Shrubby thicket, west of flat open area and down the bank towards the river terrace – Area 4

Along the edge of the flat open area and down the bank towards the river was a thicket of *Corylus cornuta*, *Crataegus douglasii*, *Symphoricarpos albus*, *Amelanchier alnifolia*, *Prunus virginiana* underneath an overstory of young *Populus tremuloides*. The low shrub layer was dominated by *Paxistima myrsinites*, *Rubus parviflorus*, together with some *Vaccinium caespitosum*, *Arctostaphylos uva-ursi*, *Apocynum androsaemifolium*. The herb layer was dominated by *Aster conspicuus*, *Aster ciliolatus*, *Vicia americana*, *Lathyrus ochroleucus*, *Lathyrus nevadensis*, *Smilacina stellata* and *Fragaria virginiana*. One small clump of the relatively rare *Cypripedium montanum* was also found here.

The only bird species located here were

- *Swainson's Thrush
- *MacGillivray's Warbler

“Grass” – young pine - East to north east side of Hill – Area 5

A grassy, flat area which has been heavily invaded by *Pinus contorta*. Some thinning of the pines has been carried out. Grasses interspersed with some *Potentilla arguta*, *Antennaria microphylla*, together with introduced species such as *Hieracium* sp., alfalfa, and dandelions. Wet spots had *Equisetum arvense* and scattered throughout the area were several deciduous shrubs species common elsewhere. Closer to the riverbank were larger shrubs of *Alnus incana* ssp. *tenuifolia* and cottonwood.

Bird species common here were

- *MacGillivray’s Warbler
- *Orange-crowned Warbler
- *Lincoln’s Sparrow
- *Dark-eyed Junco
- *American Robin
- *Swainson’s Thrush

Riparian Forest – Area 6

The riparian forest canopy is dominated by black cottonwood (*Populus balsamifera* ssp. *trichocarpa*) with some aspen. The shrub layer is dominated by *Cornus stolonifera*, *Alnus incana* ssp. *tenuifolia*, *Salix* spp. together with some *Rubus parviflorus*, *Symphoricarpos albus*, *Ribes* spp., *Lonicera involucrata* and *Rosa acicularis*. The understory contains *Smilacina stellata*, *Rubus pubescens*, *Epilobium angustifolium*, *Osmorhiza* sp., *Aster conspicuus*, *Aster ciliolatus*, *Equisetum pratense* and *Equisetum sylvaticum* among others.

Bird species seen and heard in the riparian area were:

- *Swainson’s Thrush
 - *American Robin
 - *Yellow-rumped Warbler (*Dendroica coronata*)
 - *Yellow Warbler
 - *American Redstart
 - *Northern Waterthrush (*Seirus noveboracensis*)
 - *Warbling Vireo
 - *Dusky Flycatcher
 - *Song Sparrow (*Melospiza melodia*)
- Unidentified woodpecker feeding (possibly Northern Flicker – but no calls given)

Flying along the river – using area for feeding and possibly breeding in the general area or even on site

Common Merganser (*Mergus merganser*) - may nest in cottonwoods, but no nest spotted

Belted Kingfisher (*Ceryle alcyon*) - may nest in banks near riparian areas, but no nest spotted

Mixed deciduous/conifer forest on steep slopes down from road – Area 7

This area is dominated by aspen and birch (*Betula papyrifera*), with some scattered hybrid white spruce *Picea glauca x engelmannii* and lodgepole pine. The understory is very dense and consists primarily of *Corylus cornuta*, *Symphoricarpos albus*, *Rosa acicularis*, *Rubus parviflorus*, and *Prunus pensylvanica*. Underneath the dense shrubs the dominant herbs observed were *Aster conspicuus*, *Epilobium angustifolium*, *Clintonia uniflora*, *Aralia nudicaulis*, *Smilacina stellata*, *Rubus pubescens*, *Disporum hookeri*, *Cornus canadensis*, and the relatively rare species – *Sanicula marylandica*. Along the edges, especially where the forest has been cleared was *Paxistima myrsinites* and *Epilobium angustifolium*.

Birds seen and heard in this forest were:

- *American Robin
- *Swainson's Thrush
- *Ruby-crowned Kinglet (*Regulus calendula*)
- *Dusky Flycatcher
- *Warbling Vireo
- *American Redstart (*Setophaga ruticilla*)
- *Yellow-rumped Warbler

Opposite side of river – Area 8

No attempt was made to get across the river that was in full flood. Access is difficult. The forest away from the riparian looks (through binoculars) to be similar to the forest in area 7 and would be expected to have similar plant and bird species.

Flying over and around the whole area – feeding or passing over (may not be breeding on the site)

- Northern Rough-winged Swallow
- Bank Swallow (*Riparia riparia*)
- American Crow (*Corvus brachyrhynchos*)
- Common Raven (*Corvus corax*)

Other Vertebrates (based on sign)

Very little sign was observed of other vertebrates.

- Moose – a small amount of browsing near the river's edge, no tracks or droppings observed
- Horse – droppings were found in area 3 and 4
- Red Squirrel – one was heard in the mixed forest (area 7).

Sources of Information and References Cited

British Columbia Conservation Data Centre, BC Ministry of Sustainable Resource Management, Victoria, BC

Campbell, R.W., N.K. Dawe, I. McTaggart-Cowan, J.M. Cooper, G.W. Kaiser, A.C. Stewart, and M.C.E. McNall. 1990-2002. The Birds of British Columbia. Volumes 1-4, University of British Columbia Press, Vancouver, B.C..

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INVOICE

Date: June 25, 2002

To: Pippa Shepherd
Species at Risk Co-ordinator
Ecosystem Services
Western Canada Service Centre
Parks Canada
300-300 West Georgia Street,
Vancouver, B.C. V6B 6B4

From: Rosamund Pojar
Mountainview Ecological Services
P.O. Box 3089
Smithers, B.C. V0J 2N0

Re: Inventory of Avian Species at Risk and other birds, and habitat classification at
Kitwanga Fort National Historic Site, Kitwanga, BC

Hours

On site Avian Species Survey and Habitat Classification, June 10, 2002	4.5 hours
Travel to and from site	3.0 hours
Compiling and writing report	2.5 hours
<u>Total</u>	<u>10.0 hours</u>

Expenses

1 day (10 hours) at \$400.00 per day	\$400.00
Travel – private vehicle – 250 km @ \$0.40 per km	\$100.00
<u>Total</u>	<u>\$500.00</u>

Signed:

Expenses payable to:
Rosamund Pojar
Mountainview Ecological Services
P.O. Box 3089,
Smithers, B.C. V0J 2N0