

US EPA ARCHIVE DOCUMENT

2007 Wildlife Species & Vegetative Assessment

Kennecott Eagle Minerals Company
Eagle Project Site
Marquette County, Michigan

Prepared for:

Foth Infrastructure & Environment, LLC

Prepared by:



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1.0 INTRODUCTION

King & MacGregor Environmental Inc. (KME) was contracted by Foth Infrastructure & Environmental, LLC (Foth I&E) on behalf of Kennecott Eagle Minerals Company (KEMC) to collect biological information within the Eagle Project Site (study area) located in northern Marquette County, Michigan (Figure 1-1). KME conducted baseline environmental surveys during 2006 and 2007 for birds, small mammals, large mammals and frogs and toads. In addition, vegetative surveys and wetland monitoring were conducted during 2007. This report is intended to describe the findings of the baseline surveys conducted during 2007 and should be considered as a supplement to the KME Wildlife Species Assessment, dated April 5, 2007 (KME, 2007) (2006 Wildlife Species Assessment).

1.1 Study Area

The study area is located in Sections 1, 2, 3, 10, 11, and 12, Michigamme Township (T50N, R29W), Marquette County, Michigan (Figure 1-2).

1.2 Project Purpose

The purpose of this evaluation is to continue baseline environmental investigation of birds, small mammals, large mammals, frogs and toads, vegetation, and to monitor wetlands within the study area. Biological and wetland sampling points are shown on Figure 1-3.

2.0 BIRDS

2.1. Methods

The methodologies used and described in the 2006 Wildlife Species Assessment were employed during the 2007 bird survey. A breeding bird survey was conducted June 5 and 6, 2007 at 31 sampling points. A fall bird migration study was conducted September 11 and 13, 2007 at 21 sampling points (Figure 1-3). The same sampling points were used during the 2006 and 2007 bird surveys. All points were surveyed on two separate days for both the breeding bird and fall migration surveys.

2.2 Results

The June breeding bird survey resulted in 372 birds representing 42 species (Tables 2-1 and 2-2). The September migration survey resulted in 171 birds representing 25 species (Tables 2-3 and 2-4). A total of 543 birds representing 52 species were identified during the June and September 2007 field investigations (Table 2-5).

One state threatened bird species, the osprey (*Pandion haliaetus*), was observed during the 2007 bird surveys, flying over the area of investigation. No osprey nests or likely nesting habitat were observed. The Kirtland's warbler was not detected at anytime during the bird survey events.

2.3 Discussion

The bird species identified during the 2007 bird surveys were consistent with those bird species identified in previous surveys conducted within the study area.



3.0 MAMMALS

3.1 Small Mammals

3.1.1 Methods

The methodologies used and described in the 2006 Wildlife Species Assessment were employed during the 2007 small mammal survey. Sampling was conducted on May 16, 17, and 18, 2007. The same 12 sampling points established during the 2006 small mammal survey were used during the 2007 sampling events (Figure 1-3). Each sampling point was surveyed on three separate days, for a total of 36 sampling events.

3.1.2 Results

Seventeen small mammals representing five species were identified during the May 16, 17, and 18, 2007 survey period (Table 3-1a, 3-1b, and 3-1c). These five species included deer mouse (*Peromyscus maniculatus*), Eastern chipmunk (*Tamias striatus*), snowshoe hare (*Lepus americanus*), white-footed mouse (*Peromyscus leucopus*), and red-backed vole (*Clethrionomys gapperi*). The most common small mammal identified in the survey was the Eastern chipmunk. While not sampled, the red squirrel (*Sciurus vulgaris*) was routinely observed within the study area, these observations were recorded as incidental observations (Table 3-2). No threatened or endangered small mammals were observed.

3.1.3 Discussion

The small mammals encountered on site are typical of those expected in the habitats present in the study area and are consistent with previous survey results. Small mammals were distributed throughout wooded, open, and wetland habitats. The 2007 small mammal survey results are consistent with previous sampling events conducted within the study area.

3.2 Large Mammals

3.2.1 Methods

The methodologies used and described in the 2006 Wildlife Species Assessment were employed during the 2007 large mammal survey. All observed evidence of large mammal presence was documented during the small mammal surveys, bird surveys, frog and toad surveys, and at any other time during the course of conducting field work in the study area in 2007.

3.2.2 Results

No large mammal species were directly observed within the study area during the 2007 survey events. Indirect evidence such as large mammal tracks or scat were observed for white-tail deer (*Odocoileus virginianus*), coyote (*Canis latrans*), gray wolf (*Canis lupus*), and red fox (*Vulpes vulpes*) (Table 3-2).

3.2.3 Discussion

The large mammal species observed within the study area are consistent with the species expected in the habitats present. Other relatively common species possibly present or previously observed within the study area but not detected during our 2007 surveys include, moose (*Alces alces*), beaver (*Castor canadensis*), muskrat (*Ondatra zibethicus*), raccoon (*Procyon lotor*), porcupine (*Erethizon dorsatum*), black bear (*Ursus americanus*), bobcat (*Lynx rufus*), and river otter (*Lutra canadensis*).



4.0 FROGS AND TOADS

4.1 Methods

The methodologies used and described in the 2006 Wildlife Species Assessment were employed during the 2007 frog and toad survey. KME used the same 3 frog and toad sampling points previously established in 2006 (Figure 1-3). Surveys were conducted after sunset on May 14, and May 17, 2007.

4.2 Results

A total of six frog species were heard during the surveys (Table 4-1a and 4-1b). Species heard included the northern spring peeper (*Pseudacris crucifer*), green frog (*Rana clamitans*), grey tree frog (*Hyla versicolor*), northern leopard frog (*Rana pipiens*), western chorus frog (*Pseudacris triseriata*), and wood frog (*Rana sylvatica*). No toad species were identified during the 2007 survey. Frog calling activity included Call Index Values of 1, 2, and 3. No threatened or endangered frog or toad species were identified during the survey events.

4.3 Discussion

All three of the sites surveyed exhibited use by frogs for breeding. The most frequently recorded frog species was the northern spring peeper. The frog species identified are typical of those expected in the habitats present in the study area.

5.0 THREATENED AND ENDANGERED SPECIES

5.1 Methods

Prior to conducting the 2007 surveys, KME requested from the Michigan Natural Features Inventory (MNFI), a review of the study area to identify any known occurrences of protected birds, mammals, and frog and toads within the study area (MNFI, 2007) to determine if any additional threatened or endangered species were added to the database since 2006. In accordance with Michigan Department of Natural Resources (MDNR) guidelines (MDNR, 2001), KME surveyed for any MNFI listed species or their habitats during the appropriate season. KME also noted other protected species that were observed during field investigations but not previously identified by MNFI.

5.2 Results

The MNFI database query resulted in no known occurrences of threatened or endangered birds, mammals, frogs, or toads within the study area. KME field investigations resulted in the identification of one state threatened bird species and one state threatened mammal species in the study area: osprey and grey wolf. The osprey was observed during the September 2007 bird survey. No nests or preferred nesting habitat were observed within the area of study. Grey wolf tracks and scat were observed on two-track trails within the study area during the June and September 2007 surveys.

5.3 Discussion

The osprey is one of the most widespread birds in the world. This large “fish hawk” winters and breeds in a variety of habitats normally in association with shallow water lakes, rivers, or reservoirs with adequate fish supply. Nesting sites are typically characterized by pine, aspen and hardwood forests near shallow water feeding areas. The area of study does not appear to be preferred nesting habitat for the osprey.



The status of the grey wolf was discussed in the 2006 Wildlife Species Assessment. There is no change in the information presented in that report.

6.0 WETLAND MONITORING

6.1 Methods

An assessment of 10 wetland areas (Figure 1-3) was conducted on June 6 and 7, 2007. These wetland areas are referenced as 1W, 6W through 13W, and 26W. Sampling points were established within each wetland. At each sampling point, the percent cover of each live plant species and bare soil or duff in the herbaceous (less than 3.2 feet tall) stratum was estimated in fixed-frame, square meter plots. The number of live stems of plant species in the combined shrub/sapling and over story (greater than 3.2 feet tall) stratum was determined in 30-foot radius circular plots. The 30-foot radius plots were established using a flexible tape. Photographs were taken of each sampling point (Wetland Sampling Point Photographs 1 through 20).

The sampling points were marked with steel and wooden stakes. The perimeters of the 30-foot radius plots were marked with plastic coated wire stakes. Each sampling point was located with mapping grade global positioning system (GPS) equipment.

A shallow (24-inch maximum depth) soil boring was conducted within each wetland. The soils were compared to Munsell Soils Color Charts to determine the value and chroma of the soil matrix and mottling at various depths within the boring. The findings of soils evaluation were documented for each boring.

To determine the degree to which the vegetation identified at each sampling point consisted of wetland species, the wetland indicator codes developed by the U.S. Fish and Wildlife Service (USFWS) and elaborated in the *Floristic Quality Assessment with Wetland Categories and Examples of Computer Applications for the State of Michigan* (MDNR, 2001) (FQA), were used. These codes are OBL (obligate wetland species), FACW (facultative wetland species), FAC (facultative species), FACU (facultative upland species), and UPL (upland species). OBL species occur in wetlands >99% of the time; FACW species occur in wetlands >66% of the time; FAC species occur in wetlands 50% of the time; FACU species occur in wetlands <33% of the time; UPL species occur in wetlands <1% of the time. The plus and minus signs that accompany some of the codes indicate a greater (+) or lesser (-) affinity for wetlands. To quantitatively determine the degree to which the vegetation was dominated by wetland species, each wetland indicator code was assigned a value: UPL = 5, FACU- = 4, FACU = 3, FACU+ = 2, FAC- = 1, FAC = 0, FAC+ = -1, FACW- = -2, FACW = -3, FACW+ = -4, OBL = -5. The average of these numbers serves as an index for evaluating the "wetness" of the vegetation at a site. When the average is greater than zero, the vegetation consists predominantly of non-wetland species (ranging from FAC- to UPL), whereas a negative average indicates a prevalence of wetland species (ranging from FAC+ to OBL).

An average coefficient of conservatism was determined for each sampling point. Coefficients of conservatism are values ranging from 0 to 10 which have been assigned to each plant species by the MDNR in their FQA. These values represent an estimated probability that a plant is likely to occur in a landscape relatively unaltered from what is believed to have been a pre-settlement condition.



6.2 Results

The wetland sampling point data is presented in Table 6-1a. Table 6-1b summarizes the data collected for the square meter plots. Table 6-1c summarizes the collected data for the 30-foot radius plots. Table 6-1d summarizes the combined collected data (including averages of wetland indicator code and coefficient of conservatism) for each plot. The soil boring descriptions for each wetland sampling point are described in Table 6-2.

6.3 Discussion

The data provides qualitative and quantitative baselines against which to measure future monitoring results and determine if significant changes are occurring. Overall, the plots contain an average of 93 percent native species. This percentage may be slightly higher given that plants not identifiable to the species level were not counted as native species unless it was determined that non-native species from that genera were unlikely to be present. The wetland indicator code values generally indicate a wetter flora in the herbaceous stratum. Wetland indicator values in this stratum ranged from FACU+ to OBL. In the shrub/sapling and over story stratum, the values ranged from FACU to FACW+. The average wetland indicator code values ranged for each sampling point ranged from FAC- to FACW+. The coefficients of conservatism for the plots primarily indicate a flora with fairly low fidelity to specific natural communities. One notable exception to this is sampling point 26W, which is a bog.

7.0 FLORA MONITORING

7.1 Methods

Spring monitoring of flora was conducted on June 5, 6, and 7, 2007, and late summer monitoring on September 10, 11, and 12, 2007, at 21 sampling points along the seven transects. Sampling points are identified as 1-3, 10-15, and 20-31 (Figure 1-3). The percent cover of each live plant species and bare soil or duff in the herbaceous (less than 3.2 feet tall) stratum was estimated in fixed frame square meter plots. The number of live stems of plant species in the combined shrub/sapling and over story (greater than 3.2 feet tall) stratum in 30-foot radius circular plots. The 30-foot radius plots were established using a flexible tape. Plot specific lists were compiled (Table 7-1a and 7-1b). Overall plant lists for each sampling period were also prepared (Table 7-2a and 7-2b). These lists include each species' wetland indicator code and coefficient of conservatism.

To determine the degree to which the vegetation in the wetlands consisted of wetland species, the wetland indicator codes developed by the USFWS and elaborated in the FQA, were used. These codes are OBL (obligate wetland species), FACW (facultative wetland species), FAC (facultative species), FACU (facultative upland species), and UPL (upland species). OBL species occur in wetlands >99% of the time; FACW species occur in wetlands >66% of the time; FAC species occur in wetlands 50% of the time; FACU species occur in wetlands <33% of the time; UPL species occur in wetlands <1% of the time. The plus and minus signs that accompany some of the codes indicate a greater (+) or lesser (-) affinity for wetlands. To quantitatively determine the degree to which the vegetation was dominated by wetland species, each wetland indicator code was assigned a value: UPL = 5, FACU- = 4, FACU = 3, FACU+ = 2, FAC- = 1, FAC = 0, FAC+ = -1, FACW- = -2, FACW = -3, FACW+ = -4, OBL = -5. The average of these numbers serves as an index for evaluating the "wetness" of the vegetation at a site. When the average is greater than zero, the vegetation consists predominantly of non-wetland species (ranging from FAC- to UPL),



whereas a negative average indicates a prevalence of wetland species (ranging from FAC+ to OBL).

An average coefficient of conservatism was determined for the plants identified in each sampling period. Coefficients of conservatism are values ranging from 0 to 10 which are assigned to each plant species by the MDNR in their FQA. These values represent an estimated probability that a plant is likely to occur in a landscape relatively unaltered from what is believed to be a pre-settlement condition.

The sampling points were marked with steel and wooden stakes. The perimeters of the 30-foot radius plots were marked with plastic coated wire stakes. Each sampling point was located with mapping grade GPS equipment. Photographs were taken of each sampling point (Vegetative Sampling Point Photographs 1 through 42).

7.2 Results

A total of 43 different plants species was identified in both the spring and fall surveys. Some unidentified mosses and lichens were also observed during each sampling period. Bracken fern (*Pteridium aquilinum*) and blueberry (*Vaccinium angustifolium*) were the most frequently encountered species in the square meter plots. Because the foliage of different species can overlap, the total percent cover in some plots exceeds 100 percent. Expressed as percent cover of the total area of the 21 plots, the plots were dominated by the following:

In the 30-foot radius circular plots, 21 species were identified in both the spring and fall surveys. The most frequently encountered species were red maple (*Acer rubrum*), jack pine (*Pinus banksiana*), and black spruce (*Picea mariana*), which were found in 16, 16 and 15 plots, respectively. Total stems varied somewhat from spring to fall with red maple ranging from 324 to 347, jack pine from 252 to 249, and black spruce from 293 to 287.

Plants not identifiable to the species level were not counted as native species unless it was determined that non-native species from that genera were unlikely to be present. Wetland indicator codes range from OBL to UPL, with an overall average of FAC for each season. The coefficients of conservatism ranged from 1 to 10, with an overall average of 4.6 for each season. No state or federally protected plant species were identified.

7.3 Discussion

The data provides qualitative and quantitative baselines against which to measure future monitoring results and determine if significant changes are occurring. The minor differences between the two seasonal overall plant lists is likely due to slight differences in sampling procedures. The variation in the total number of stems in the 30-foot radius plots is also likely contributable primarily to variability in sampling procedures rather than mortality or recruitment. The wide range of wetland indicator codes indicates some variability of microclimatic conditions. The relatively high overall coefficient of conservatism average reflects the lack of non-native species.



8.0 CONCLUSION

A total of 52 bird species were identified during the June and September, 2007 field investigations. One state threatened bird species, the osprey, was identified flying over the study area. A total of five small mammal species were identified within the study area. No direct observations of large mammals were made. However, several indirect observations of large mammal tracks and scat were documented. Six species of frogs, none of them threatened or endangered, were identified within the study area. Vegetative sampling plots within both upland and wetland communities within the study area identified species common to this region. No threatened, endangered, or special concern vegetative species were encountered during the surveys. All of the bird, frog, mammal, and frog species identified within the study area are typical of those species associated with the vegetative communities of the region.



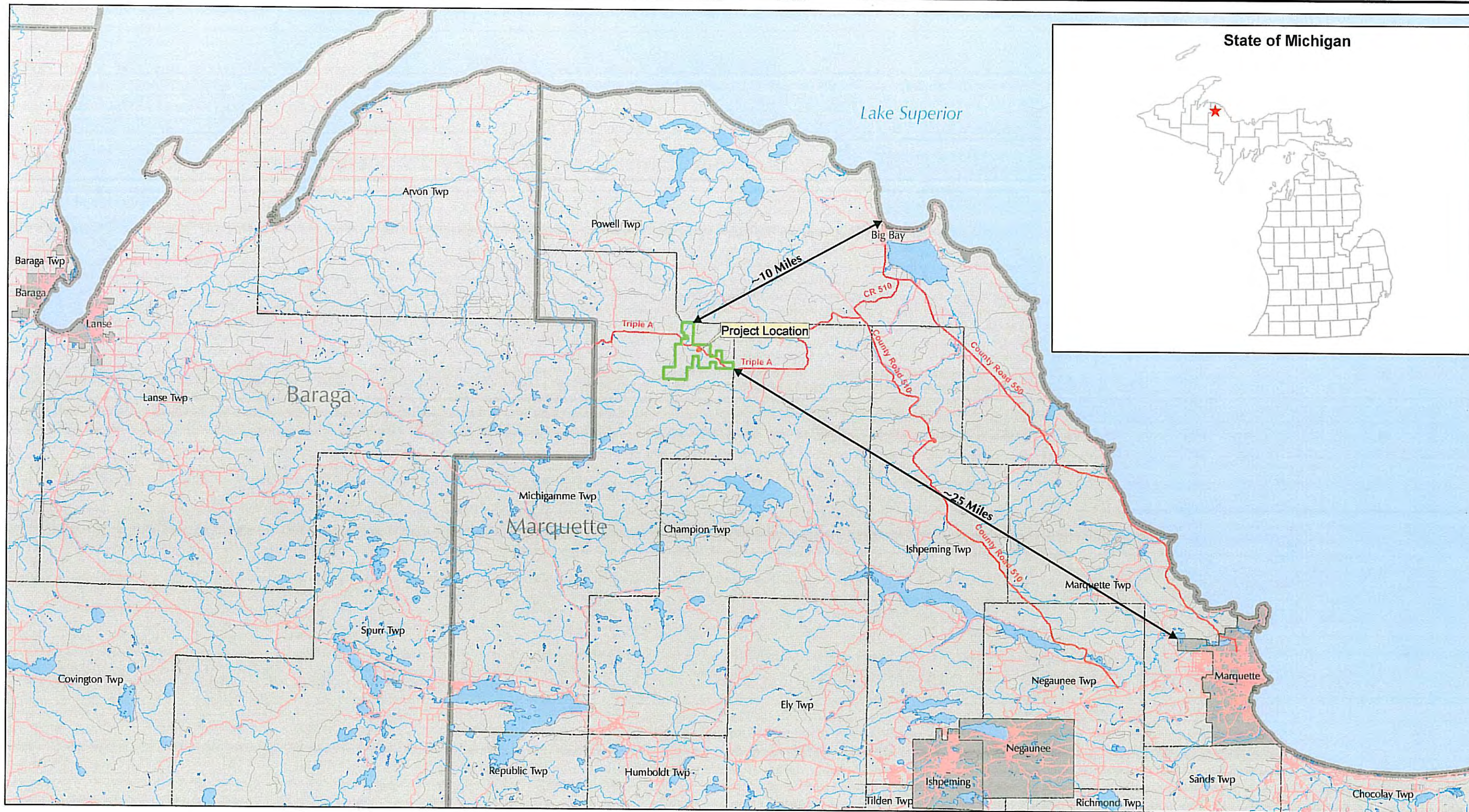
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- Michigan Department of Natural Resources (MDNR). 2001. Guidelines for Conducting Endangered and Threatened Species Surveys. http://www.michigandnr.com/publications/pdfs/huntingwildlifehabitat/TE_surveyguide.pdf
- Michigan Natural Features Inventory (MNFI). 2007. Query for Protected Birds, Mammals, and Frogs and Toads Within the Study Area. <http://web4msue.msu.edu/mnfi/>



FIGURES





- NOTES**
1. Surface property boundary as of November 18, 2004 supplied by Kennecott via Golder & Associates Inc., August, 2005.
 2. Horizontal datum based on NAD 83/94.
Horizontal coordinates based on UTM Zone 16.
 3. All base information downloaded from Michigan Center of Geographic Information (<http://www.michigan.gov/cgi>).
 4. Site Location - Project Site within Sections 11 & 12, T50N, R29W, Town of Michigamme, Marquette County, Michigan.

- LEGEND**
- | | | | |
|--|-----------------------------|--|-------------|
| | Counties | | Highways |
| | Minor Civil Divisions | | Major Roads |
| | Kennecott Surface Ownership | | Minor Roads |
| | Lakes and Rivers | | |



King & MacGregor
Environmental, Inc.



Foth Infrastructure & Environment, LLC

Foth Infrastructure & Environment, LLC

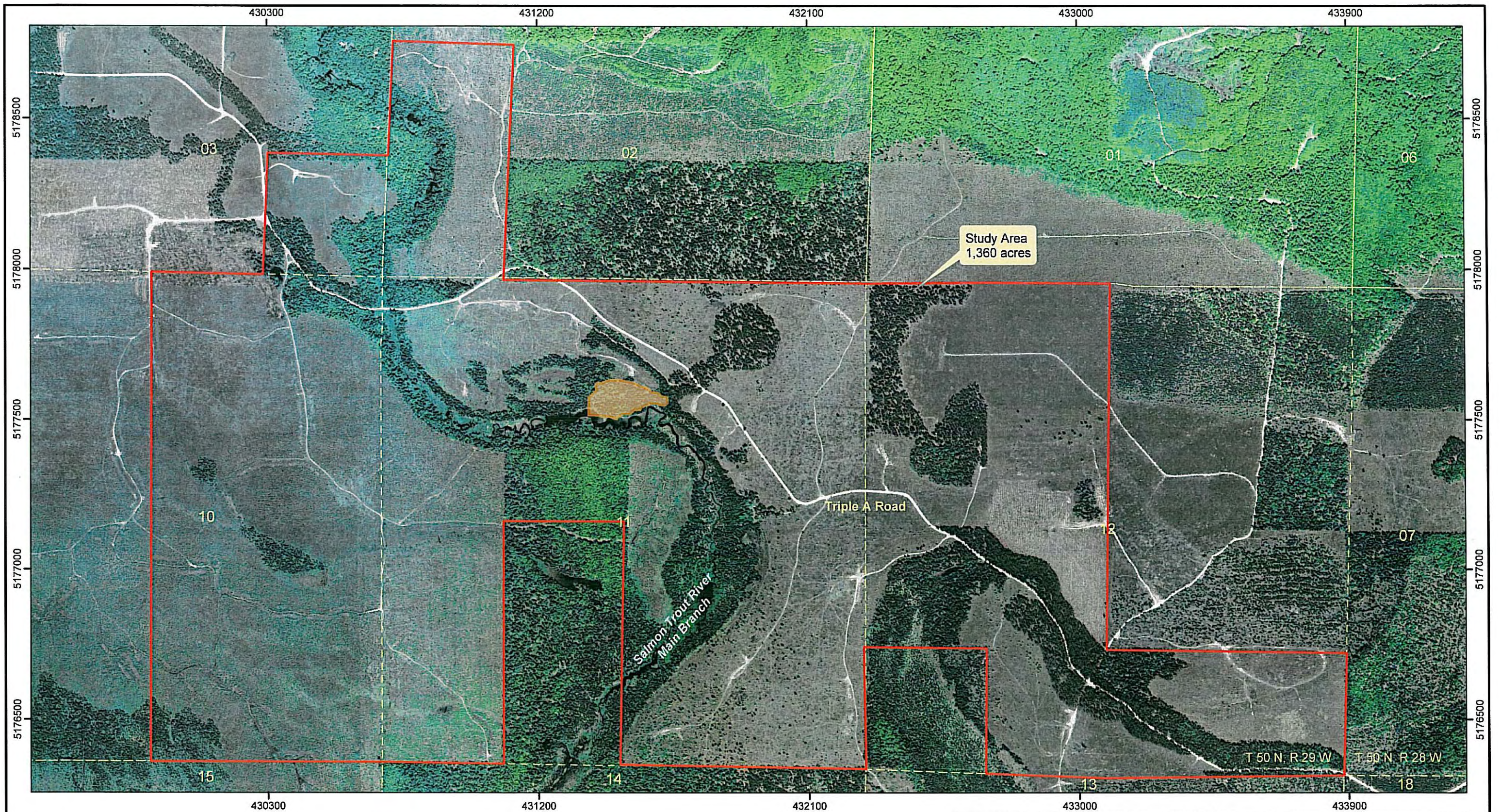
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APPROVED BY:		SVD1	DATE: MAR. '08
APPROVED BY:			DATE:



**Kennecott
Eagle Minerals**

**FIGURE 1-1
PROJECT LOCATION**

Scale: 0 2 4 Miles
Date: MARCH, 2008
Prepared by: BJW1
Scope: 04W018



NOTES

1. Surface Property Boundary, Ore Body, and Orthophotography supplied by Kennecott via Golder Associates Inc., August, 2005.
2. Horizontal datum based on NAD 83/94.
Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 11 & 12, T50N, R29W, Town of Michigamme, Marquette County, Michigan.

LEGEND

- Study Area
- Sections
- Ore Body



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REVISED	DATE	BY	DESCRIPTION
CHECKED BY:		AKM	DATE: MAR. '08
APPROVED BY:		SVD1	DATE: MAR. '08
APPROVED BY:			DATE:



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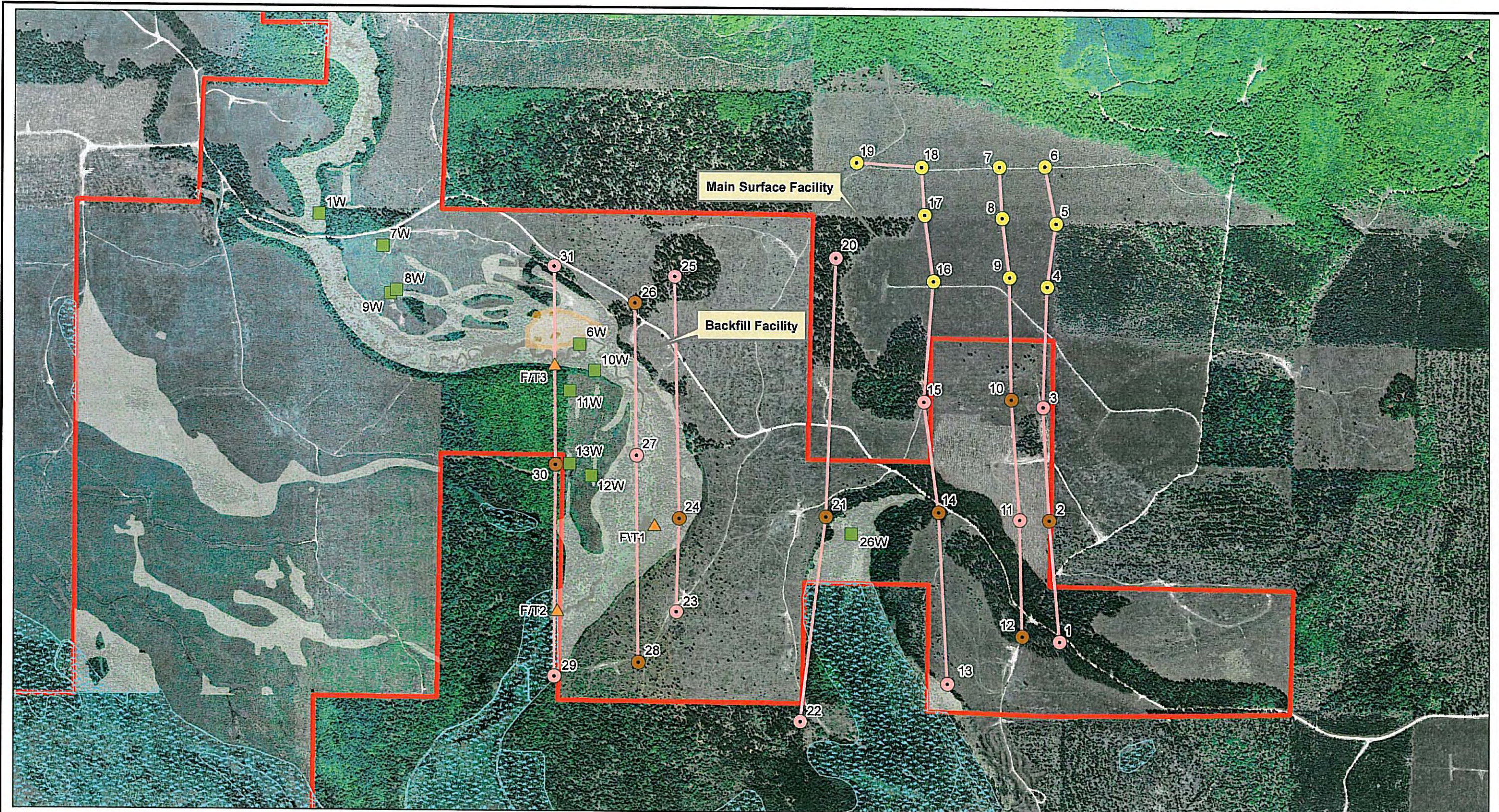
FIGURE 1-2 STUDY AREA

Scale: 0 150 300 Meters

Date: MARCH, 2008

Prepared by: BJW1

Scope: 04W018



NOTES

1. Surface Property Boundary, Ore Body, and Orthophotograph supplied by Kennecott via Golder Associates Inc., August, 2005.
2. Wetland boundary (Wetland and Coastal Resources), Wildlife Assessment Transects and Narrow-Leaved Gentian supplied by Kennecott via Golder Associates Inc., August, 2005.
3. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
4. US Fish and Wildlife Service Wetlands downloaded from USFWS website.
5. Site Location - Project Site within Sections 11 & 12, T50N, R29W, Town of Michigamme, Marquette County, Michigan.
6. Sample type and locations provided by King & MacGregor Environmental, Inc. February 18, 2008.

LEGEND

- Eagle Ore Body
- Location of Surface Facilities
- Kennecott Surface Ownership
- Wetland Complex Boundary
- Wetlands adapted from US Fish and Wildlife Service Wetlands Inventory Map

- Biological Transects
- Bird Sampling Point
- Bird and Vegetation Sampling Point
- Bird, Vegetation, and Small Mammal Sampling Point
- Frog/Toad Sampling Point
- Wetland Vegetation Sampling Point



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REVISED	DATE	BY	DESCRIPTION
CHECKED BY:		AKM	DATE: MAR. '08
APPROVED BY:		SVD1	DATE: MAR. '08
APPROVED BY:			DATE:



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FIGURE 1-3
BIOLOGICAL AND WETLAND SAMPLING AREAS

Scale: 0 150 300 Meters

Date: MARCH, 2008

Prepared by: BJW1

Scope: 04W018

TABLES



Table 2-1: June 2007 Bird Sampling Point Data - Eagle Site

Sampling Point Location	Date	Common Name	Scientific Name	Number of Occurrences	Type of Detection
1	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
1	06/05/07	common raven	<i>Corvus corax</i>	1	Auditory
1	06/05/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
1	06/05/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Auditory
1	06/05/07	black-and-white warbler	<i>Mniotilta varia</i>	1	Auditory
1	06/05/07	black-capped chickadee	<i>Poecile atricapilla</i>	1	Auditory
1	06/05/07	red-breasted nuthatch	<i>Sitta canadensis</i>	1	Auditory
1	06/05/07	American robin	<i>Turdus migratorius</i>	1	Auditory
1	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
1	06/06/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
1	06/06/07	common raven	<i>Corvus corax</i>	1	Visual
1	06/06/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
2	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
2	06/05/07	American crow	<i>Corvus brachyrhynchos</i>	1	Visual
2	06/05/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory/Visual
2	06/05/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Visual
2	06/05/07	field sparrow	<i>Spizella pusilla</i>	1	Auditory
2	06/05/07	American robin	<i>Turdus migratorius</i>	1	Auditory
2	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
2	06/06/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
2	06/06/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory
2	06/06/07	field sparrow	<i>Spizella pusilla</i>	1	Auditory
3	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
3	06/05/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
3	06/05/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
3	06/05/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Auditory
3	06/05/07	eastern bluebird	<i>Sialia sialis</i>	1	Auditory
3	06/05/07	American robin	<i>Turdus migratorius</i>	1	Auditory
3	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
3	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
3	06/06/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
3	06/06/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory/Visual
3	06/06/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory
3	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
3	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
4	06/05/07	hermit thrush	<i>Catharus guttatus</i>	2	Auditory
4	06/05/07	blue jay	<i>Cyanocitta cristata</i>	1	Visual
4	06/05/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
4	06/05/07	red-breasted nuthatch	<i>Sitta canadensis</i>	1	Auditory/Visual
4	06/05/07	American robin	<i>Turdus migratorius</i>	2	Auditory
4	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
4	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
4	06/06/07	chipping sparrow	<i>Spizella passerina</i>	1	Auditory
4	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	2	Auditory
5	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
5	06/05/07	northern flicker	<i>Colaptes auratus</i>	1	Auditory
5	06/05/07	common raven	<i>Corvus corax</i>	1	Auditory

Table 2-1 con't: June 2007 Bird Sampling Point Data - Eagle Site

Sampling Point Location	Date	Common Name	Scientific Name	Number of Occurrences	Type of Detection
5	06/05/07	black-capped chickadee	<i>Poecile atricapilla</i>	1	Auditory/Visual
5	06/05/07	red-breasted nuthatch	<i>Sitta canadensis</i>	1	Visual
5	06/05/07	American robin	<i>Turdus migratorius</i>	1	Auditory
5	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	3	Auditory
5	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
6	06/05/07	ruffed grouse	<i>Bonasa umbellus</i>	1	Auditory
6	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
6	06/05/07	northern flicker	<i>Colaptes auratus</i>	1	Auditory
6	06/05/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
6	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
6	06/05/07	Philadelphia vireo	<i>Vireo philadelphicus</i>	1	Auditory
6	06/06/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
6	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	3	Auditory
7	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
7	06/05/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
7	06/05/07	common raven	<i>Corvus corax</i>	2	Visual
7	06/05/07	blue jay	<i>Cyanocitta cristata</i>	1	Visual
7	06/05/07	American robin	<i>Turdus migratorius</i>	1	Auditory
7	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	2	Auditory
7	06/05/07	Philadelphia vireo	<i>Vireo philadelphicus</i>	1	Auditory
7	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	2	Auditory/Visual
8	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
8	06/05/07	common raven	<i>Corvus corax</i>	1	Auditory
8	06/05/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
8	06/05/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
8	06/05/07	red-breasted nuthatch	<i>Sitta canadensis</i>	1	Auditory
8	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	2	Auditory
8	06/06/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
8	06/06/07	vesper sparrow	<i>Poecetes gramineus</i>	1	Auditory/Visual
8	06/06/07	chipping sparrow	<i>Spizella passerina</i>	1	Auditory
8	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
9	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
9	06/05/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
9	06/05/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Auditory/Visual
9	06/05/07	chipping sparrow	<i>Spizella passerina</i>	1	Auditory/Visual
9	06/05/07	American robin	<i>Turdus migratorius</i>	1	Auditory
9	06/06/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Auditory/Visual
9	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
10	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
10	06/05/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
10	06/05/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
10	06/05/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Auditory
10	06/05/07	Eastern bluebird	<i>Sialia sialis</i>	2	Auditory/Visual
10	06/05/07	American robin	<i>Turdus migratorius</i>	1	Auditory
10	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
10	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
10	06/06/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory/Visual

Table 2-1 con't: June 2007 Bird Sampling Point Data - Eagle Site

Sampling Point Location	Date	Common Name	Scientific Name	Number of Occurrences	Type of Detection
10	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	2	Auditory
10	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
11	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
11	06/05/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
11	06/05/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Auditory
11	06/05/07	field sparrow	<i>Spizella pusilla</i>	1	Auditory
11	06/05/07	American robin	<i>Turdus migratorius</i>	1	Auditory
11	06/05/07	golden-winged warbler	<i>Vermivora chrysoptera</i>	1	Auditory
11	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
11	06/06/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
11	06/06/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory
11	06/06/07	field sparrow	<i>Spizella pusilla</i>	1	Auditory
12	06/05/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory/Visual
12	06/05/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
12	06/05/07	field sparrow	<i>Spizella pusilla</i>	1	Auditory
12	06/05/07	American robin	<i>Turdus migratorius</i>	1	Auditory
12	06/06/07	yellow warbler	<i>Dendroica petechia</i>	1	Auditory
12	06/06/07	eastern bluebird	<i>Sialia sialis</i>	1	Visual
13	06/05/07	hermit thrush	<i>Catharus guttatus</i>	2	Auditory
13	06/05/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
13	06/05/07	Common raven	<i>Corvus corax</i>	1	Auditory
13	06/05/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
13	06/05/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
13	06/05/07	American robin	<i>Turdus migratorius</i>	1	Auditory
13	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
13	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
13	06/06/07	yellow warbler	<i>Dendroica petechia</i>	1	Auditory
13	06/06/07	eastern bluebird	<i>Sialia sialis</i>	1	Auditory/Visual
13	06/06/07	red-breasted nuthatch	<i>Sitta canadensis</i>	1	Auditory
13	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
14	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
14	06/05/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
14	06/05/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Visual
14	06/05/07	ruby-crowned kinglet	<i>Regulus calendula</i>	1	Visual
14	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
14	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
14	06/06/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
14	06/06/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
14	06/06/07	yellow-rumped warbler	<i>Dendroica coronata</i>	2	Auditory/Visual
14	06/06/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory/Visual
14	06/06/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Visual
14	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
14	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
15	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
15	06/05/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
15	06/05/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory
15	06/05/07	Philadelphia vireo	<i>Vireo philadelphicus</i>	1	Auditory

Table 2-1 con't: June 2007 Bird Sampling Point Data - Eagle Site

Sampling Point Location	Date	Common Name	Scientific Name	Number of Occurrences	Type of Detection
15	06/06/07	Canada goose	<i>Branta canadensis</i>	1	F
15	06/06/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
15	06/06/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
15	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
15	06/06/07	blue-headed vireo	<i>Vireo solitarius</i>	1	Auditory/Visual
16	06/05/07	hermit thrush	<i>Catharus guttatus</i>	2	Auditory
16	06/05/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
16	06/05/07	American robin	<i>Turdus migratorius</i>	1	Auditory
16	06/06/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
16	06/06/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory/Visual
16	06/06/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory
16	06/06/07	sandhill crane	<i>Grus canadensis</i>	1	Auditory/Visual
16	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
17	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
17	06/05/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
17	06/05/07	red-breasted nuthatch	<i>Sitta canadensis</i>	1	Auditory
17	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	2	Auditory
17	06/05/07	Philadelphia vireo	<i>Vireo philadelphicus</i>	1	Auditory
17	06/06/07	Blue jay	<i>Cyanocitta cristata</i>	1	Auditory/Visual
17	06/06/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory
17	06/06/07	black-capped chickadee	<i>Poecile atricapilla</i>	1	Auditory
17	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	2	Auditory
18	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
18	06/05/07	common raven	<i>Corvus corax</i>	1	Auditory
18	06/05/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
18	06/05/07	chipping sparrow	<i>Spizella passerina</i>	1	Auditory
18	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	2	Auditory
18	06/06/07	hermit thrush	<i>Catharus guttatus</i>	2	Auditory
18	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	2	Auditory/Visual
19	06/05/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
19	06/05/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Visual
19	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
19	06/06/07	ruby-throated hummingbird	<i>Archilochus colubris</i>	1	Visual
19	06/06/07	hermit thrush	<i>Catharus guttatus</i>	1	Visual
19	06/06/07	Eastern bluebird	<i>Sialia sialis</i>	1	Auditory
19	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
19	06/06/07	blue-headed vireo	<i>Vireo solitarius</i>	1	Auditory
20	06/05/07	Pine warbler	<i>Dendroica pinus</i>	1	Auditory
20	06/05/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Auditory
20	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	2	Auditory
20	06/06/07	hermit thrush	<i>Catharus guttatus</i>	2	Visual
20	06/06/07	northern flicker	<i>Colaptes auratus</i>	1	Auditory
20	06/06/07	pine warbler	<i>Dendroica pinus</i>	2	Auditory
20	06/06/07	red-breasted nuthatch	<i>Sitta canadensis</i>	1	Auditory
20	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
20	06/06/07	blue-headed vireo	<i>Vireo solitarius</i>	1	Auditory
21	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory

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Sampling Point Location	Date	Common Name	Scientific Name	Number of Occurrences	Type of Detection
21	06/05/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
21	06/05/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory
21	06/05/07	ruby-crowned kinglet	<i>Regulus calendula</i>	1	Auditory
21	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
21	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
21	06/06/07	ruby-throated hummingbird	<i>Archilochus colubris</i>	1	Visual
21	06/06/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory
21	06/06/07	sandhill crane	<i>Grus canadensis</i>	1	Flyover
21	06/06/07	ruby-crowned kinglet	<i>Regulus calendula</i>	1	Auditory
21	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	2	Auditory/Visual
21	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
22	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
22	06/05/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
22	06/05/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
22	06/05/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory
22	06/05/07	American robin	<i>Turdus migratorius</i>	1	Auditory
22	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
22	06/06/07	Common raven	<i>Corvus corax</i>	2	Visual
22	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
23	06/05/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory
23	06/05/07	chipping sparrow	<i>Spizella passerina</i>	2	Auditory
23	06/06/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
23	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
24	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
24	06/05/07	hermit thrush	<i>Catharus guttatus</i>	2	Auditory
24	06/05/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
24	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
24	06/06/07	Canada goose	<i>Branta canadensis</i>	1	Auditory
24	06/06/07	Blackburnian warbler	<i>Dendroica fusca</i>	2	Auditory
24	06/06/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory
24	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	2	Auditory
25	06/05/07	common nighthawk	<i>Chordeiles minor</i>	1	Auditory
25	06/05/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
25	06/05/07	black-throated green warbler	<i>Dendroica virens</i>	1	Auditory
25	06/05/07	Eastern bluebird	<i>Sialia sialis</i>	1	Auditory
25	06/06/07	red-winged blackbird	<i>Agelaius phoeniceus</i>	1	Flyover
25	06/06/07	Canada goose	<i>Branta canadensis</i>	1	Flyover
25	06/06/07	northern flicker	<i>Colaptes auratus</i>	1	Auditory
25	06/06/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
25	06/06/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
26	06/05/07	Northern flicker	<i>Colaptes auratus</i>	1	Auditory
26	06/05/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
26	06/05/07	common raven	<i>Corvus corax</i>	1	Auditory
26	06/05/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
26	06/05/07	eastern bluebird	<i>Sialia sialis</i>	2	Auditory/Visual
26	06/05/07	blue-headed vireo	<i>Vireo solitarius</i>	1	Visual
26	06/06/07	Canada goose	<i>Branta canadensis</i>	1	Flyover

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Sampling Point Location	Date	Common Name	Scientific Name	Number of Occurrences	Type of Detection
26	06/06/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
26	06/06/07	black-throated green warbler	<i>Dendroica virens</i>	1	Auditory
26	06/06/07	eastern kingbird	<i>Tyrannus tyrannus</i>	1	Auditory
26	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
27	06/05/07	Northern flicker	<i>Colaptes auratus</i>	1	Auditory
27	06/05/07	Blackburnian warbler	<i>Dendroica fusca</i>	1	Auditory
27	06/05/07	alder flycatcher	<i>Emoidonax alnorum</i>	1	Auditory
27	06/05/07	common yellowthroat	<i>Geothlypis trichas</i>	1	Auditory
27	06/05/07	ruby-crowned kinglet	<i>Regulus calendula</i>	1	Auditory
27	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
27	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
27	06/06/07	bay-breasted warbler	<i>Dendroica castanea</i>	1	Auditory
27	06/06/07	yellow warbler	<i>Dendroica petechia</i>	1	Auditory
27	06/06/07	pine warbler	<i>Dendroica pinus</i>	1	Auditory
27	06/06/07	alder flycatcher	<i>Emoidonax alnorum</i>	1	Auditory
27	06/06/07	common yellowthroat	<i>Geothlypis trichas</i>	1	Auditory
27	06/06/07	black-capped chickadee	<i>Poecile atricapilla</i>	1	Auditory
27	06/06/07	ruby-crowned kinglet	<i>Regulus calendula</i>	1	Auditory
27	06/06/07	golden-winged warbler	<i>Vermivora chrysoptera</i>	1	Auditory
27	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory/Visual
27	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	2	Auditory
28	06/05/07	common raven	<i>Corvus corax</i>	1	Auditory
28	06/05/07	yellow-rumped warbler	<i>Dendroica coronata</i>	1	Auditory
28	06/05/07	black-capped chickadee	<i>Poecile atricapilla</i>	1	Visual
28	06/06/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
28	06/06/07	dark-eyed junco	<i>Junco hyemalis</i>	2	Auditory
28	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
29	06/05/07	eastern wood-pewee	<i>Contopus virens</i>	1	Auditory
29	06/05/07	yellow-rumped warbler	<i>Dendroica coronata</i>	1	Visual
29	06/05/07	chipping sparrow	<i>Spizella passerina</i>	1	Auditory
29	06/06/07	Blackburnian warbler	<i>Dendroica fusca</i>	1	Auditory
29	06/06/07	red-breasted nuthatch	<i>Sitta canadensis</i>	1	Auditory
29	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
29	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
30	06/05/07	ovenbird	<i>Seiurus aurocapilla</i>	1	Auditory
30	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
30	06/06/07	Canada goose	<i>Branta canadensis</i>	1	Flyover
30	06/06/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
30	06/06/07	yellow warbler	<i>Dendroica petechia</i>	1	Auditory
30	06/06/07	black-and-white warbler	<i>Mniotilta varia</i>	1	Auditory
30	06/06/07	Ovenbird	<i>Seiurus aurocapilla</i>	1	Auditory
30	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
31	06/05/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
31	06/05/07	black-and-white warbler	<i>Mniotilta varia</i>	1	Auditory
31	06/05/07	black-capped chickadee	<i>Poecile atricapilla</i>	1	Auditory
31	06/05/07	red-breasted nuthatch	<i>Sitta canadensis</i>	1	Auditory
31	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory

Table 2-1 con't: June 2007 Bird Sampling Point Data - Eagle Site

Sampling Point Location	Date	Common Name	Scientific Name	Number of Occurrences	Type of Detection
31	06/06/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
31	06/06/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory
31	06/06/07	ruby-crowned kinglet	<i>Regulus calendula</i>	1	Auditory
31	06/06/07	American robin	<i>Turdus migratorius</i>	1	Auditory
31	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
31	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
**	05/14/07	vesper sparrow	<i>Poocetes gramineus</i>	4	Visual
**	05/16/07	mallard	<i>Anas platyrhynchos</i>	1	Visual
**	05/16/07	spruce grouse	<i>Falciennis canadensis</i>	1	Visual
**	05/17/07	blue-headed vireo	<i>Vireo solitarius</i>	1	Auditory/Visual
**	06/05/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
**	06/05/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory
**	06/05/07	chipping sparrow	<i>Spizella passerina</i>	1	Auditory/Visual
**	06/05/07	chipping sparrow	<i>Spizella passerina</i>	1	Auditory
**	06/05/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Visual
**	06/05/07	hermit thrush	<i>Catharus guttatus</i>	2	Auditory/Visual
**	06/05/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
**	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
**	06/05/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
**	06/05/07	Northern flicker	<i>Colaptes auratus</i>	1	Auditory
**	06/05/07	Philadelphia vireo	<i>Vireo philadelphicus</i>	2	Auditory
**	06/05/07	red-breasted nuthatch	<i>Sitta canadensis</i>	2	Auditory/Visual
**	06/05/07	ruby-throated hummingbird	<i>Archilochus colubris</i>	1	Visual
**	06/05/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Auditory
**	06/06/07	black-capped chickadee	<i>Poecile atricapilla</i>	2	Auditory
**	06/06/07	black-throated blue warbler	<i>Dendroica caerulescens</i>	1	Auditory
**	06/06/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
**	06/06/07	brown thrasher	<i>Foxostoma rufum</i>	1	Auditory/Visual
**	06/06/07	chipping sparrow	<i>Spizella passerina</i>	2	Auditory
**	06/06/07	chipping sparrow	<i>Spizella passerina</i>	2	Auditory
**	06/06/07	common raven	<i>Corvus corax</i>	1	Auditory
**	06/06/07	dark-eyed junco	<i>Junco hyemalis</i>	2	Auditory
**	06/06/07	eastern bluebird	<i>Sialia sialis</i>	1	Auditory/Visual
**	06/06/07	hermit thrush	<i>Catharus guttatus</i>	2	Auditory
**	06/06/07	hermit thrush	<i>Catharus guttatus</i>	1	Auditory
**	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	2	Auditory
**	06/06/07	Nashville warbler	<i>Vermivora ruficapilla</i>	1	Auditory
**	06/06/07	red-breasted nuthatch	<i>Sitta canadensis</i>	1	Auditory
**	06/06/07	ruby-throated hummingbird	<i>Archilochus colubris</i>	1	Visual
**	06/06/07	ruffed grouse	<i>Bonasa umbellus</i>	1	Tracks
**	06/06/07	upland sandpiper	<i>Bartramia longicauda</i>	1	Auditory
**	06/06/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	3	Auditory
**	06/06/07	yellow-rumped warbler	<i>Dendroica coronata</i>	1	Auditory/Visual
Total Number of Bird Occurences				372	

** Species identified in Study Area, but not associated with sampling point locations

Table 2-2: June 2007 Bird Species Summary - Eagle Site

Species Count	Common Name	Total # of Birds Observed
1	alder flycatcher	2
2	American crow	17
3	American robin	15
4	bay-breasted warbler	1
5	black-and-white warbler	3
6	Blackburnian warbler	4
7	black-capped chickadee	8
8	black-throated blue warbler	1
9	black-throated green warbler	2
10	blue jay	17
11	blue-headed vireo	5
12	brown thrasher	15
13	Canada goose	5
14	chipping sparrow	13
15	common nighthawk	1
16	Common raven	13
17	common yellowthroat	2
18	dark-eyed junco	16
19	eastern bluebird	10
20	eastern kingbird	1
21	eastern wood-pewee	1
22	field sparrow	5
23	golden-winged warbler	2
24	hermit thrush	41
25	mallard	1
26	Nashville warbler	56
27	Northern flicker	7
28	Ovenbird	2
29	Philadelphia vireo	6
30	pine warbler	24
31	red-breasted nuthatch	12
32	red-winged blackbird	1
33	ruby-crowned kinglet	6
34	ruby-throated hummingbird	4
35	ruffed grouse	2
36	sandhill crane	2
37	spruce grouse	1
38	upland sandpiper	1
39	vesper sparrow	5
40	white-throated sparrow	33
41	yellow warbler	4
42	yellow-rumped warbler	5
TOTAL BIRD OCCURRENCES		372

KEY:

 Observed only 1-3 total birds

Table 2-3: September 2007 Bird Sampling Point Data - Eagle Site

Sampling Point Location	Date	Common Name	Scientific Name	Number of Occurrences	Type of Detection
1	09/11/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Auditory
1	09/11/07	black-capped chickadee	<i>Poecile atricapillus</i>	1	Auditory
1	09/13/07	black-capped chickadee	<i>Poecile atricapillus</i>	2	Visual
1	09/13/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
2	09/11/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
2	09/11/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Visual
2	09/11/07	black-capped chickadee	<i>Poecile atricapillus</i>	1	Auditory
2	09/11/07	white-breasted nuthatch	<i>Sitta carolinensis</i>	1	Auditory
2	09/11/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
2	09/11/07	northern flicker	<i>Colaptes auratus</i>	1	Visual
2	09/13/07	northern flicker	<i>Colaptes auratus</i>	13	Visual
2	09/13/07	ruby-crowned kinglet	<i>Regulus calendula</i>	1	Auditory
2	09/13/07	hermit thrush	<i>Catharus guttatus</i>	1	Visual
3	09/11/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Visual
3	09/11/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
3	09/11/07	black-capped chickadee	<i>Poecile atricapillus</i>	1	Visual
3	09/11/07	northern flicker	<i>Colaptes auratus</i>	1	Auditory
3	09/13/07	black-capped chickadee	<i>Poecile atricapillus</i>	1	Auditory
3	09/13/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
10	09/11/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Visual
10	09/11/07	red-tailed hawk	<i>Buteo jamaicensis</i>	1	Visual
10	09/11/07	osprey	<i>Pandion haliaetus</i>	1	Visual
10	09/11/07	American crow	<i>Corvus brachyrhynchos</i>	1	Visual
10	09/11/07	blue jay	<i>Cyanocitta cristata</i>	1	Visual
10	09/13/07	black-capped chickadee	<i>Poecile atricapillus</i>	2	Auditory/Visual
10	09/13/07	song sparrow	<i>Melospiza melodia</i>	4	Visual
11	09/11/07	northern flicker	<i>Colaptes auratus</i>	1	Visual
11	09/11/07	white-breasted nuthatch	<i>Sitta carolinensis</i>	1	Visual
11	09/11/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Visual
11	09/13/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
11	09/13/07	Canada goose	<i>Branta canadensis</i>	30	Auditory
11	09/13/07	yellow-shafted flicker	<i>Colaptes auratus</i>	1	Visual
11	09/13/07	downy woodpecker	<i>Picoides pubescens</i>	1	Auditory
12	09/11/07	black-capped chickadee	<i>Poecile atricapillus</i>	1	Auditory
12	09/11/07	American robin	<i>Turdus migratorius</i>	1	Auditory
12	09/11/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
12	09/11/07	blue jay	<i>Cyanocitta cristata</i>	1	Visual
12	09/13/07	red-tailed hawk	<i>Buteo jamaicensis</i>	1	Visual
12	09/13/07	northern flicker	<i>Colaptes auratus</i>	1	Auditory
12	09/13/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
13	09/11/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Visual
13	09/11/07	common raven	<i>Corvus corax</i>	1	Auditory
13	09/11/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
13	09/13/07	common raven	<i>Corvus corax</i>	1	Visual
13	09/13/07	yellow-shafted flicker	<i>Colaptes auratus</i>	1	Visual
13	09/13/07	palm warbler	<i>Dendroica palmarum</i>	2	Auditory/Visual
13	09/13/07	eastern bluebird	<i>Sialia sialis</i>	1	Visual

Table 2-3 con't: September 2007 Bird Sampling Point Data - Eagle Site

Sampling Point Location	Date	Common Name	Scientific Name	Number of Occurrences	Type of Detection
14		no occurrences			
14	09/13/07	red-tailed hawk	<i>Buteo jamaicensis</i>	2	Visual
15	09/11/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
15	09/13/07	yellow-rumped warbler	<i>Dendroica coronata</i>	1	Visual
15	09/13/07	red-tailed hawk	<i>Buteo jamaicensis</i>	2	Visual
15	09/13/07	black-capped chickadee	<i>Poecile atricapillus</i>	1	Auditory
15	09/13/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
20	09/11/07	black-capped chickadee	<i>Poecile atricapillus</i>	1	Visual
20	09/11/07	yellow-rumped warbler	<i>Dendroica coronata</i>	1	Visual
20	09/11/07	northern flicker	<i>Colaptes auratus</i>	1	Auditory
20	09/13/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
20	09/13/07	northern flicker	<i>Colaptes auratus</i>	1	Auditory
21		no occurrences			
21	09/13/07	black-capped chickadee	<i>Poecile atricapillus</i>	1	Auditory
21	09/13/07	American crow	<i>Corvus brachyrhynchos</i>	1	Visual
22	09/11/07	American kestrel	<i>Falco sparverius</i>	1	Visual
22	09/13/07	red-tailed hawk	<i>Buteo jamaicensis</i>	1	Flyover
22	09/13/07	blue jay	<i>Cyanocitta cristata</i>	1	Visual
23	09/11/07	black-capped chickadee	<i>Poecile atricapillus</i>	1	Visual
23	09/11/07	hermit thrush	<i>Catharus guttatus</i>	1	Visual
23	09/11/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
23	09/13/07	red-tailed hawk	<i>Buteo jamaicensis</i>	1	Flyover
24	09/11/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
24	09/13/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
24	09/13/07	common raven	<i>Corvus corax</i>	1	Auditory
24	09/13/07	black-capped chickadee	<i>Poecile atricapillus</i>	1	Visual
25	09/11/07	blue jay	<i>Cyanocitta cristata</i>	2	Auditory
25	09/11/07	black-capped chickadee	<i>Poecile atricapillus</i>	1	Auditory/Visual
25	09/11/07	yellow-rumped warbler	<i>Dendroica coronata</i>	2	Visual
25	09/11/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
25	09/13/07	palm warbler	<i>Dendroica palmarum</i>	6	Visual
26	09/11/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
26	09/13/07	downy woodpecker	<i>Picoides pubescens</i>	1	Auditory
26	09/13/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
27	09/11/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
27	09/11/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory/Visual
27	09/11/07	yellow-rumped warbler	<i>Dendroica coronata</i>	1	Visual
27	09/13/07	blue jay	<i>Cyanocitta cristata</i>	1	Auditory
27	09/13/07	white-throated sparrow	<i>Zonotrichia albicollis</i>	1	Visual
28		no occurrences			
28	09/13/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Visual
28	09/13/07	hermit thrush	<i>Catharus guttatus</i>	1	Visual
29	09/11/07	black-capped chickadee	<i>Poecile atricapillus</i>	2	Visual
29	09/13/07	black-capped chickadee	<i>Poecile atricapillus</i>	1	Auditory
29	09/13/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
29	09/13/07	ruby-crowned kinglet	<i>Regulus calendula</i>	1	Auditory
29	09/13/07	blue jay	<i>Cyanocitta cristata</i>	1	Visual

Table 2-3 con't: September 2007 Bird Sampling Point Data - Eagle Site

Sampling Point Location	Date	Common Name	Scientific Name	Number of Occurrences	Type of Detection
30	09/11/07	American robin	<i>Turdus migratorius</i>	1	Auditory
30	09/13/07	black-capped chickadee	<i>Poecile atricapillus</i>	1	Auditory
31	09/11/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Auditory
31	09/11/07	downy woodpecker	<i>Picoides pubescens</i>	1	Auditory
31	09/13/07	slate-colored junco	<i>Junco h. hyemalis</i>	2	Visual
31	09/13/07	American crow	<i>Corvus brachyrhynchos</i>	1	Auditory
31	09/13/07	red-breasted nuthatch	<i>Sitta canadensis</i>	1	Auditory
**	09/11/07	dark-eyed junco	<i>Junco hyemalis</i>	1	Visual
**	09/11/07	hermit thrush	<i>Catharus guttatus</i>	1	Visual
**	09/11/07	northern harrier	<i>Circus cyaneus</i>	1	Visual
**	09/11/07	ruby-crowned kinglet	<i>Regulus calendula</i>	1	Visual
**	09/11/07	vesper sparrow	<i>Pooecetes gramineus</i>	1	Visual
**	09/11/07	vesper sparrow	<i>Pooecetes gramineus</i>	1	Visual
**	09/11/07	vesper sparrow	<i>Pooecetes gramineus</i>	1	Visual
**	09/11/07	vesper sparrow	<i>Pooecetes gramineus</i>	1	Visual
**	09/12/07	red-tailed hawk	<i>Buteo jamaicensis</i>	1	Visual
**	09/13/07	American robin	<i>Turdus migratorius</i>	1	Visual
**	09/13/07	dark-eyed junco	<i>Junco hyemalis</i>	2	Visual
**	09/13/07	northern flicker	<i>Colaptes auratus</i>	1	Auditory
**	09/13/07	northern flicker	<i>Colaptes auratus</i>	1	Auditory
**	09/13/07	red-tailed hawk	<i>Buteo jamaicensis</i>	1	Visual
Total Number of Bird Occurrences				171	

** Species identified in Study Area, but not associated with sampling point locations

Table 2-4: September 2007 Bird Species Summary - Eagle Site

Species Count	Common Name	Number of Occurrences
1	American crow	18
2	American kestrel	1
3	American robin	3
4	black-capped chickadee	19
5	blue jay	13
6	Canada goose	30
7	common raven	3
8	dark-eyed junco	11
9	downy woodpecker	3
10	eastern bluebird	1
11	hermit thrush	4
12	northern flicker	21
13	northern harrier	1
14	osprey	1
15	palm warbler	8
16	red-breasted nuthatch	1
17	red-tailed hawk	10
18	ruby-crowned kinglet	3
19	slate-colored junco	2
20	song sparrow	4
21	vesper sparrow	4
22	white-breasted nuthatch	2
23	white-throated sparrow	1
24	yellow-rumped warbler	5
25	yellow-shafted flicker	2
TOTAL BIRD OCCURRENCES		171

KEY:

 Observed only 1-3 total birds

Table 2-5: Spring & Fall 2007 Bird Sampling Point Data - Eagle Site

Species Count	Common Name	Number of Occurrences
1	alder flycatcher	2
2	American crow	35
3	American kestrel	1
4	American robin	18
5	bay-breasted warbler	1
6	black-and-white warbler	3
7	Blackburnian warbler	4
8	black-capped chickadee	27
9	black-throated blue warbler	1
10	black-throated green warbler	2
11	blue jay	30
12	blue-headed vireo	5
13	brown thrasher	15
14	Canada goose	35
15	chipping sparrow	13
16	common nighthawk	1
17	common raven	16
18	common yellowthroat	2
19	dark-eyed junco	27
20	downy woodpecker	3
21	eastern bluebird	11
22	eastern kingbird	1
23	eastern wood-pewee	1
24	field sparrow	5
25	golden-winged warbler	2
26	hermit thrush	45
27	mallard	1
28	Nashville warbler	56
29	northern flicker	28
30	northern harrier	1
31	osprey	1
32	Ovenbird	2
33	palm warbler	8
34	Philadelphia vireo	6
35	pine warbler	24
36	red-breasted nuthatch	13
37	red-tailed hawk	10
38	red-winged blackbird	1
39	ruby-crowned kinglet	9
40	ruby-throated hummingbird	4
41	ruffed grouse	2
42	sandhill crane	2
43	slate-colored junco	2
44	song sparrow	4
45	spruce grouse	1
46	upland sandpiper	1
47	vesper sparrow	9
48	white-breasted nuthatch	2
49	white-throated sparrow	34
50	yellow warbler	4
51	yellow-rumped warbler	10
52	yellow-shafted flicker	2
TOTAL BIRD OCCURRENCES		543

Table 3-1a: Small Mammal Data May 16, 2007 - Eagle Site

Sampling Point	May 16, 2007							
	Small Snap Trap 1		Small Snap Trap 2		Large Snap Trap		Live Trap	
	Common Name	Scientific Name	Common Name	Scientific Name	Common Name	Scientific Name	Common Name	Scientific Name
1		O		O		O		O
3		O		O		O		O
11		O		O		O		O
13		O		X		O		O
15	deer mouse	<i>Peromyscus maniculatus</i>		X		O	eastern chipmunk	<i>Tamias striatus</i>
20		O		O		O	eastern chipmunk	<i>Tamias striatus</i>
22		O		O		O		O
23	eastern chipmunk	<i>Tamias striatus</i>		O	snowshoe hare	<i>Lepus americanus</i>		O
25		O		O		O		O
27		O		O		X		O
29	boreal red-backed vole	<i>Clethrionomys gapperi</i>		O		O		O
31		X		X		O	deer mouse	<i>Peromyscus maniculatus</i>

* O=Trap unsnapped

X=Trap snapped

Table 3-1b: Small Mammal Data May 17, 2007 - Eagle Site

Sampling Point	May 17, 2007							
	Small Snap Trap 1		Small Snap Trap 2		Large Snap Trap		Live Trap	
	Common Name	Scientific Name	Common Name	Scientific Name	Common Name	Scientific Name	Common Name	Scientific Name
1	O		O		O		O	
3	O		O		O		O	
11	O		O		O		O	
13	X		O		O		O	
15	O		O		O		O	
20	O		O		O		O	
22	eastern chipmunk	<i>Tamias striatus</i>	O		O		O	
23	O		O		O		O	
25	O		O		O		O	
27	O		O		X		O	
29	X		O		O		O	
31	eastern chipmunk	<i>Tamias striatus</i>	white-footed mouse	<i>Peromyscus leucopus</i>	O - bait gone		white-footed mouse	<i>Peromyscus leucopus</i>

* O=Trap unsnapped

X=Trap snapped

Table 3-1c: Small Mammal Data May 18, 2007 - Eagle Site

Sampling Point	May 18, 2007							
	Small Snap Trap 1		Small Snap Trap 2		Large Snap Trap		Live Trap	
	Common Name	Scientific Name	Common Name	Scientific Name	Common Name	Scientific Name	Common Name	Scientific Name
1	X		X		Eastern chipmunk	<i>Tamias striatus</i>	O	
3	O		O		O		O	
11	O		O		O		O	
13	O		O		O		O	
15	O		deer mouse	<i>Peromyscus maniculatus</i>	O		O	
20	All traps snapped (human activity)							
22	O		O		O		eastern chipmunk	<i>Tamias striatus</i>
23	O		O		O		O	
25	X		O		O		O	
27	X		O		O		O	
29	X		O		O		eastern chipmunk	<i>Tamias striatus</i>
31	white-footed mouse	<i>Peromyscus leucopus</i>	X		eastern chipmunk	<i>Tamias striatus</i>	O	

* O=Trap unsnapped
X=Trap snapped

Table 3-2: Incidental Wildlife Species 2007 Data - Eagle Site

Date	Common Name	Scientific Name	Number of Occurrences	Behavior	Location	Type of Detection
06/06/07	coyote	<i>Canis latrans</i>	1	unknown	Meander South Road	Tracks
06/06/07	gray wolf	<i>Canis lupus</i>	1	unknown	Meander North Road	Tracks
06/06/07	raccoon	<i>Procyon lotor</i>	1	unknown	Meander North Road	Tracks
06/06/07	red fox	<i>Vulpes vulpes</i>	1	unknown	Meander South Road	Tracks
09/11/07	red squirrel	<i>Tamiasciurus hudsonicus</i>	1	unknown	Sampling Point 27	Auditory
09/11/07	red squirrel	<i>Tamiasciurus hudsonicus</i>	1	unknown	Sampling Point 1	Visual
09/11/07	red squirrel	<i>Tamiasciurus hudsonicus</i>	1	evading	Sampling Point 2	Visual
09/11/07	red squirrel	<i>Tamiasciurus hudsonicus</i>	1	unknown	Sampling Point 3	Auditory
09/11/07	red squirrel	<i>Tamiasciurus hudsonicus</i>	1	unknown	Sampling Point 10	Auditory
09/11/07	red squirrel	<i>Tamiasciurus hudsonicus</i>	1	unknown	Sampling Point 14	Visual
09/11/07	red squirrel	<i>Tamiasciurus hudsonicus</i>	1	unknown	Sampling Point 15	Visual
09/11/07	red squirrel	<i>Tamiasciurus hudsonicus</i>	1	unknown	Sampling Point 29	Auditory
09/11/07	red squirrel	<i>Tamiasciurus hudsonicus</i>	1	unknown	Sampling Point 23	Visual
09/13/07	gray wolf	<i>Canis lupus</i>	1	scat with bones and fur	Sampling Point 23	Visual
09/13/07	red squirrel	<i>Tamiasciurus hudsonicus</i>	1	unknown	Sampling Point 28	Visual
09/13/07	red squirrel	<i>Tamiasciurus hudsonicus</i>	2	unknown	Sampling Point 20	Auditory
09/13/07	red squirrel	<i>Tamiasciurus hudsonicus</i>	1	unknown	Sampling Point 3	Auditory

Table 4-1a: Frog & Toad Data May 14, 2007 - Eagle Site

Sampling Point	Call Index Value *	Species		Start Time	Temp
		Common Name	Scientific Name		
1	2	western chorus frog	<i>Pseudacris triseriata</i>	8:40 PM	77° F
	3	northern spring peeper	<i>Pseudacris crucifer</i>		
	1	northern leopard frog	<i>Rana pipiens</i>		
2	2	northern spring peeper	<i>Pseudacris crucifer</i>	8:10 PM	77° F
	2	western chorus frog	<i>Pseudacris triseriata</i>		
	1	northern leopard frog	<i>Rana pipiens</i>		
3	3	northern spring peeper	<i>Pseudacris crucifer</i>	9:12 PM	77° F
	1	gray tree frog	<i>Hyla versicolor</i>		
	1	wood frog	<i>Rana sylvatica</i>		
	1	green frog	<i>Rana clamitans</i>		

*1=Individuals can be counted and there is space between calls

2=Individuals can be counted but there is some overlapping of calls

3=Full chorus; calls are continuous and overlapping. Individuals cannot be distinguished

Table 4-1b: Frog & Toad Data May 17, 2007 - Eagle Site

Sampling Point	Call Index Value *	Species		Start Time	Temp
		Common Name	Scientific Name		
F1	2	northern spring peeper	<i>Pseudacris crucifer</i>	8:40 PM	60°F
	1	western chorus frog	<i>Pseudacris triseriata</i>		
F2	1	northern spring peeper	<i>Pseudacris crucifer</i>	8:15 PM	60°F
	1	western chorus frog	<i>Pseudacris triseriata</i>		
F3	3	northern spring peeper	<i>Pseudacris crucifer</i>	9:10 PM	57°F
	2	western chorus frog	<i>Pseudacris triseriata</i>		
	1	northern leopard frog	<i>Rana pipiens</i>		

*1=Individuals can be counted and there is space between calls

2=Individuals can be counted but there is some overlapping of calls

3=Full chorus; calls are continuous and overlapping. Individuals cannot be distinguished

Table 6-1a: Wetlands Survey 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot Woody Species			Square Meter Plot Herbaceous Species		
		Scientific Name	Common Name	#Stems	Scientific Name	Common Name	%Cover
1W	6/7/07	<i>Acer rubrum</i>	red maple	53	<i>Panicum sp.</i>	panic grass	20
1W	6/7/07	<i>Alnus rugosa</i>	tag alder	112	<i>Cirsium arvense</i>	Canada thistle	5
1W	6/7/07	<i>Abies balsamea</i>	balsam fir	17	<i>Anemone canadensis</i>	Canada anemone	5
1W	6/7/07	<i>Prunus serotina</i>	black cherry	33	<i>Thelypteris palustris</i>	marsh fern	5
1W	6/7/07	<i>Picea mariana</i>	black spruce	16	<i>Clintonia borealis</i>	blue bead lily	5
1W	6/7/07	<i>Pinus strobus</i>	white pine	1	<i>Carex stricta</i>	sedge	45
1W	6/7/07	<i>Lonicera sp.</i>	honeysuckle	19	<i>Ranunculus sp.</i>	buttercup	5
1W	6/7/07	<i>Corylus cornuta</i>	hazelnut	16	<i>Sphagnum sp.</i>	sphagnum moss	5
1W	6/7/07	<i>Amelanchier arborea</i>	juneberry	3			
6W	6/7/07	<i>Alnus rugosa</i>	tag alder	90	<i>Carex stricta</i>	sedge	95
6W	6/7/07	<i>Larix laricina</i>	tamarack	1	<i>Cicuta maculata</i>	water hemlock	5
7W	6/7/07	<i>Acer rubrum</i>	red maple	148	<i>Rubus strigosus</i>	wild red raspberry	15
7W	6/7/07	<i>Prunus serotina</i>	black cherry	54	<i>Calamagrostis canadensis</i>	blue-joint grass	10
7W	6/7/07	<i>Populus tremuloides</i>	quaking aspen	9	<i>Spagnum sp.</i>	sphagnum moss	30
7W	6/7/07	<i>Picea mariana</i>	black spruce	5	<i>Trientalis borealis</i>	starflower	5
7W	6/7/07	<i>Pinus banksiana</i>	jack pine	3	<i>Acer rubrum</i>	red maple	5
7W	6/7/07	<i>Betula papyrifera</i>	paper birch	5	<i>Carex sp.</i>	sedge	5
7W	6/7/07	<i>Pinus resinosa</i>	red pine	1	<i>Poa sp.</i>	bluegrass	15
7W	6/7/07	<i>Vaccinium myrtilloides</i>	blueberry	12	<i>Maianthemum canadense</i>	Canada mayflower	5
7W	6/7/07				<i>Hieracium caespitosum</i>	yellow hawkweed	5
8W	6/7/07	<i>Acer rubrum</i>	red maple	21	<i>Cornus canadensis</i>	bunchberry	55
8W	6/7/07	<i>Picea mariana</i>	black spruce	40	<i>Vaccinium angustifolium</i>	blueberry	10
8W	6/7/07	<i>Populus tremuloides</i>	eastern cottonwood	2	<i>Hieracium caespitosum</i>	yellow hawkweed	5
8W	6/7/07	<i>Prunus serotina</i>	black cherry	22	<i>Rubus hispidus</i>	swamp dewberry	5
8W	6/7/07	<i>Pinus banksiana</i>	jack pine	17	<i>Sphagnum sp.</i>	sphagnum moss	5
8W	6/7/07	<i>Betula papyrifera</i>	paper birch	4	<i>Oxalis montana</i>	wood sorrel	5
8W	6/7/07	<i>Vaccinium myrtilloides</i>	blueberry	1	<i>Viola sp.</i>	violet	5
8W	6/7/07				<i>Populus tremuloides</i>	quaking aspen	5
8W	6/7/07				<i>Prunus serotina</i>	black cherry	5
8W	6/7/07				<i>Carex sp.</i>	sedge	5

Table 6-1a con't: Wetlands Survey 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot Woody Species			Square Meter Plot Herbaceous Species		
		Scientific Name	Common Name	#Stems	Scientific Name	Common Name	%Cover
9W	6/7/07	<i>Prunus serotina</i>	black cherry	99	<i>Alnus rugosa</i>	tag alder	10
9W	6/7/07	<i>Acer rubrum</i>	red maple	23	<i>Hieracium caespitosum</i>	yellow hawkweed	15
9W	6/7/07	<i>Pinus banksiana</i>	jack pine	8	<i>Pteridium aquilinum</i>	brackenfern	5
9W	6/7/07	<i>Populus tremuloides</i>	quaking aspen	5	<i>Maianthemum canadense</i>	Canada mayflower	5
9W	6/7/07	<i>Betula papyrifera</i>	paper birch	4	<i>Calamagrostis canadensis</i>	blue-joint grass	25
9W	6/7/07	<i>Picea mariana</i>	black spruce	5	<i>Poa sp.</i>	bluegrass	15
9W	6/7/07	<i>Pinus strobus</i>	white pine	1	<i>Rubus strigosus</i>	wild red raspberry	5
9W	6/7/07	<i>Vaccinium mytilloides</i>	blueberry	18			
9W	6/7/07	<i>Quercus rubra</i>	red oak	1			
10W	6/6/07	<i>Acer rubrum</i>	red maple	175	<i>Trientalis borealis</i>	starflower	5
10W	6/6/07	<i>Larix laricina</i>	tamarack	6	<i>Coptis trifolia</i>	goldthread	10
10W	6/6/07	<i>Picea mariana</i>	black spruce	27	<i>Osmunda cinnamomea</i>	cinnamon fern	15
10W	6/6/07	<i>Abies balsamea</i>	balsam fir	9	<i>Clintonia borealis</i>	bluebead-lily	5
10W	6/6/07	<i>Corylus americana</i>	hazelnut	2	<i>Sphagnum sp.</i>	sphagnum moss	95
10W	6/6/07	<i>Nemopanthus mucronatus</i>	mountain holly	7	<i>Acer rubrum</i>	red maple	5
10W	6/6/07				<i>Thelypteris palustris</i>	marsh fern	5
10W	6/6/07				<i>Athyrium filix-femina</i>	lady fern	5
10W	6/6/07				<i>Oxalis montana</i>	wood sorrel	5
10W	6/6/07				<i>Carex sp.</i>	sedge	10
10W	6/6/07				bare ground		5
11W	6/6/07	<i>Prunus serotina</i>	black cherry	10	<i>Carex scoparia</i>	sedge	5
11W	6/6/07	<i>Acer rubrum</i>	red maple	14	<i>Carex gynandra</i>	sedge	5
11W	6/6/07	<i>Pinus banksiana</i>	jack pine	1	<i>Poa sp.</i>	bluegrass	5
11W	6/6/07	<i>Corylus cornuta</i>	hazelnut	27	<i>Hieracium sp.</i>	hawkweed	5
11W	6/6/07				<i>Acer rubrum</i>	red maple	5
11W	6/6/07				<i>Prunus serotina</i>	black cherry	5
11W	6/6/07				<i>Agrostis gigantea</i>	redtop	10
11W	6/6/07				bare ground		60
12W	6/6/07	<i>Larix laricina</i>	tamarack	4	<i>Iris versicolor</i>	wild blue flag	5
12W	6/6/07	<i>Picea mariana</i>	black spruce	13	<i>Carex stricta</i>	sedge	35

Table 6-1a con't: Wetlands Survey 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot Woody Species			Square Meter Plot Herbaceous Species		
		Scientific Name	Common Name	#Stems	Scientific Name	Common Name	%Cover
12W	6/6/07	<i>Abies balsamea</i>	balsam fir	1	<i>Calamagrostis canadensis</i>	reedgrass	15
12W	6/6/07	<i>Pinus banksiana</i>	jack pine	1	<i>Spagnum sp.</i>	sphagnum moss	100
12W	6/6/07	<i>Amelanchier arborea</i>	juneberry	1			
13W	6/6/07	<i>Picea mariana</i>	black spruce	22	<i>Betula sp. (seedling)</i>	birch	5
13W	6/6/07	<i>Acer rubrum</i>	red maple	27	<i>Rubus sp.</i>	bramble	5
13W	6/6/07	<i>Larix laricina</i>	tamarack	1	<i>Vaccinium angustifolium</i>	blueberry	5
13W	6/6/07	<i>Pinus banksiana</i>	jack pine	7	<i>Sphagnum sp.</i>	sphagnum moss	70
13W	6/6/07	<i>Betula papyrifera</i>	paper birch	22	<i>Cornus canadensis</i>	bunchberry	5
13W	6/6/07	<i>Prunus serotina</i>	black cherry	8	<i>Trientalis borealis</i>	starflower	5
13W	6/6/07	<i>Pinus strobus</i>	white pine	4	<i>Festuca sp.</i>	fescue	40
13W	6/6/07	<i>Salix bebbiana</i>	Bebb's willow	1	<i>Maianthemum canadense</i>	Canada mayflower	5
13W	6/6/07	<i>Prunus pensylvanica</i>	pin cherry	1	<i>Calamagrostis canadensis</i>	reedgrass	5
13W	6/6/07				<i>Carex sp.</i>	sedge	5
13W	6/6/07				<i>Acer rubrum</i>	red maple	5
26W	6/6/07	<i>Larix laricina</i>	tamarack	9	<i>Spagnum sp.</i>	sphagnum moss	100
26W	6/6/07	<i>Picea mariana</i>	black spruce	23	<i>Chamaedaphne calyculata</i>	leatherleaf	20
26W	6/6/07	<i>Ledum groenlandicum</i>	labrador tea	2	<i>Andromeda glaucophylla</i>	bog rosemary	10
26W	6/6/07				<i>Poa sp.</i>	grass	30
26W	6/6/07				<i>Ledum groenlandicum</i>	labrador tea	10
26W	6/6/07				<i>Sarracenia purpurea</i>	pitcher-plant	10

Table 6-1b: Square Meter 2007 Plot Summary - Eagle Site

Plot	Number of Species	Number of Native Species	Wetland Indicator Value	Coefficient of Conservatism
1W	7	6	-2.00	3.0
6W	2	2	-5.00	4.0
7W	9	7	-0.50	2.5
8W	10	9	1.57	3.4
9W	7	5	-0.67	2.3
10W	9	9	-1.13	4.3
11W	7	5	-0.33	2.0
12W	4	4	-5.00	4.0
13W	10	10	-0.50	3.3
26W	6	5	-5.00	9.0
Average	7.1	6.2	-1.86	3.8

Table 6-1c: 30-Foot Radius 2007 Plot Summary - Eagle Site

Plot	Number of Species	Number of Native Species	Wetland Indicator Value	Coefficient of Conservatism
1W	9	8	0.38	3.6
6W	2	2	-4.00	5.0
7W	8	8	1.25	3.4
8W	7	7	1.00	3.0
9W	9	9	1.44	3.2
10W	6	6	-1.50	4.5
11W	4	4	2.75	3.3
12W	5	5	-0.60	4.6
13W	9	9	0.56	3.1
26W	3	3	-3.67	6.3
Average	6.2	6.1	-0.24	4.0

Table 6-1d: 2007 Plot Wetland Indicator Code & Coefficient of Conservatism Summary - Eagle Site

Plot	Number of Species	Number of Native Species	Wetland Indicator Value	Coefficient of Conservatism
1W	15	14	-0.81	3.3
6W	4	4	-4.50	4.5
7W	17	15	0.38	3.0
8W	17	16	1.29	3.2
9W	16	14	0.39	2.8
10W	15	15	-1.32	4.4
11W	11	9	1.21	2.7
12W	9	9	-2.80	4.3
13W	19	19	0.03	3.2
26W	9	8	-4.34	7.7
Average	13.2	12.3	-1.05	3.9

Table 6-2: Wetland Soil 2007 Data - Eagle Site

Sampling Point	SOIL			
	Depth (Inches)	Matrix Color	Mottle Color	Texture/Notes
1W	0-18	10YR 3/1	n/a	Organic
6W	0-18	10YR 3/3	n/a	Organic
7W	0-3	10YR 5/2	n/a	Sand
	3-18	10YR 4/2	5YR 5/8	Sand w/ heavy cobble
8W	0-5	10YR 2/1	n/a	Organic
	5-10	10YR 5/2	10YR 5/6	Sand, uncommon distinct mottles
	10-18	10YR 4/2	10YR 5/6	Sand w/ heavy cobble, common distinct mottles
9W	0-2	10YR 3/2	n/a	Sand (med)
	2-6	10YR 5/2	n/a	Sand
	6-18	10YR 3/4	n/a	Sand (coarse)
10W	0-4	10YR 2/1	n/a	Sphagnum moss mat
	4-18			Histic
11W	0-1	7.5YR 5/2	n/a	Sandy
	1-11	7.5YR 4/6	7.5YR 2.5/2	Sand
	11-18	7.5YR 4/6	n/a	Sand
12W	0-12	10YR 5/4		Peat, dark brown
	12-24			Sand (med) w/ pebbly concretions
13 W	0-1	7.5YR 5/3-4	n/a	Organics/sand
	1-8			Sand (med-coarse)
	8-24	5YR 3/3	n/a	Sand (coarse)
26W	5-0	7.5YR 3/2 7.5YR 2.5/2	n/a 2.5YR 4/2	Sphagnum moss mat
	0-7			Histic/fibric
	7-18			Sandy

Table7-1a: Vegetative Survey Spring 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot			Square Meter Plot		
		Woody Species			Herbaceous Species		
		Scientific Name	Common Name	# Stems	Scientific Name	Common Name	% Cover
1	6/5/07	<i>Pinus banksiana</i>	jack pine	18	<i>Pteridium aquilinum</i>	bracken fern	25
1	6/5/07	<i>Acer rubrum</i>	red maple	39	<i>Vaccinium myrtilloides</i>	Canada blueberry	15
1	6/5/07	<i>Pinus strobus</i>	white pine	1	<i>Vaccinium angustifolium</i>	blueberry	15
1	6/5/07	<i>Picea mariana</i>	black spruce	10	<i>Gaultheria procumbens</i>	wintergreen	10
1	6/5/07	<i>Salix sp.</i>	willow	9	<i>Maianthemum canadense</i>	Canada mayflower	10
1	6/5/07	<i>Amelanchier arborea</i>	juneberry	8	<i>Lycopodium sp.</i>	clubmoss	10
1	6/5/07	<i>Abies balsamea</i>	balsam fir	8	<i>Sphagnum sp.</i>	sphagnum moss	10
1	6/5/07				<i>Vaccinium macrocarpon</i>	cranberry	5
1	6/5/07				<i>Epigaea repens</i>	trailing arbutus	5
1	6/5/07				<i>Coptis sp.</i>	goldthread	5
1	6/5/07				bare ground		20
2	6/5/07	<i>Pinus banksiana</i>	jack pine	1	<i>Maianthemum canadense</i>	Canada mayflower	5
2	6/5/07	<i>Picea mariana</i>	black spruce	18	<i>Epigaea repens</i>	trailing arbutus	5
2	6/5/07				<i>Vaccinium myrtilloides</i>	Canada blueberry	10
2	6/5/07				<i>Deschampsia flexuosa</i>	hair grass	15
2	6/5/07				<i>Panicum sp.</i>	panicgrass	5
2	6/5/07				<i>Trientalis borealis</i>	starflower	5
2	6/5/07				<i>Sphagnum sp.</i>	sphagnum moss	30
2	6/5/07				<i>Cladonia rangiferina</i>	reindeer moss	25
3	6/5/07	<i>Pinus banksiana</i>	jack pine	34	<i>Vaccinium angustifolium</i>	blueberry	40
3	6/5/07				<i>Vaccinium myrtilloides</i>	Canada blueberry	15
3	6/5/07				<i>Pteridium aquilinum</i>	bracken fern	5
3	6/5/07				<i>Deschampsia flexuosa</i>	hair grass	5
3	6/5/07				<i>Apocynum androsaemifolium</i>	spreading dogbane	5
3	6/5/07				<i>Cladonia rangiferina</i>	reindeer moss	5
3	6/5/07				<i>Sphagnum sp.</i>	sphagnum moss	5
3	6/5/07				bare ground		15
3	6/5/07				<i>Carex sp.</i>	sedge	5
10	6/5/07	<i>Pinus strobus</i>	white pine	1	<i>Vaccinium myrtilloides</i>	Canada blueberry	20
10	6/5/07	<i>Picea mariana</i>	black spruce	18	<i>Gaultheria procumbens</i>	wintergreen	5
10	6/5/07	<i>Pinus banksiana</i>	jack pine	11	<i>Cladonia rangiferina</i>	reindeer moss	40
10	6/5/07	<i>Acer rubrum</i>	red maple	1	bare ground		30

Table 7-1a con't: Vegetative Survey Spring 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot			Square Meter Plot		
		Woody Species			Herbaceous Species		
		Scientific Name	Common Name	# Stems	Scientific Name	Common Name	% Cover
10	6/5/07				<i>Vaccinium angustifolium</i>	blueberry	5
11	6/5/07	<i>Pinus banksiana</i>	jack pine	6	<i>Maianthemum canadense</i>	Canada mayflower	5
11	6/5/07				<i>Pteridium aquilinum</i>	bracken fern	5
11	6/5/07				<i>Carex sp.</i>	sedge	80
11	6/5/07				<i>Pinus banksiana</i>	jack pine	5
11	6/5/07				<i>Vaccinium angustifolium</i>	blueberry	15
11	6/5/07				<i>Sphagnum sp.</i>	sphagnum moss	5
11	6/5/07				bare ground		10
12	6/5/07	<i>Pinus banksiana</i>	jack pine	27	<i>Vaccinium myrtilloides</i>	Canada blueberry	40
12	6/5/07	<i>Picea mariana</i>	black spruce	18	<i>Vaccinium angustifolium</i>	blueberry	20
12	6/5/07	<i>Abies balsamea</i>	balsam fir	1	<i>Gaultheria procumbens</i>	wintergreen	10
12	6/5/07	<i>Acer rubrum</i>	red maple	3	<i>Pteridium aquilinum</i>	bracken fern	15
12	6/5/07	<i>Pinus strobus</i>	white pine	1	<i>Maianthemum canadense</i>	Canada mayflower	5
12	6/5/07				<i>Sphagnum sp.</i>	sphagnum moss	95
12	6/5/07				bare ground		5
13	6/5/07	<i>Pinus banksiana</i>	jack pine	29	<i>Vaccinium angustifolium</i>	blueberry	60
13	6/5/07	<i>Larix laricina</i>	tamarack	3	<i>Maianthemum canadense</i>	Canada mayflower	5
13	6/5/07	<i>Picea mariana</i>	black spruce	35	<i>Chamaedaphne calyculata</i>	leather leaf	5
13	6/5/07				<i>Sphagnum sp.</i>	sphagnum moss	100
14	6/5/07	<i>Pinus banksiana</i>	jack pine	12	<i>Pteridium aquilinum</i>	bracken fern	20
14	6/5/07	<i>Abies balsamea</i>	balsam fir	5	<i>Vaccinium angustifolium</i>	blueberry	60
14	6/5/07	<i>Picea mariana</i>	black spruce	23	<i>Epigaea repens</i>	trailing arbutus	5
14	6/5/07	<i>Salix humilis</i>	prairie willow	1	<i>Maianthemum canadense</i>	Canada mayflower	15
14	6/5/07				<i>Amelanchier sp.</i>	serviceberry	10
14	6/5/07				<i>Sphagnum sp.</i>	sphagnum moss	50
14	6/5/07				<i>Pinus banksiana</i>	jack pine	5
14	6/5/07				<i>Vaccinium myrtilloides</i>	Canada blueberry	5
14	6/5/07				<i>Poa sp.</i>	grass	5
15	6/5/07	<i>Pinus banksiana</i>	jack pine	36	<i>Pteridium aquilinum</i>	bracken fern	10
15	6/5/07	<i>Acer rubrum</i>	red maple	59	<i>Vaccinium angustifolium</i>	blueberry	15

Table 7-1a con't: Vegetative Survey Spring 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot			Square Meter Plot		
		Woody Species			Herbaceous Species		
		Scientific Name	Common Name	# Stems	Scientific Name	Common Name	% Cover
15	6/5/07				<i>Vaccinium myrtilloides</i>	Canada blueberry	5
15	6/5/07				<i>Cladonia rangiferina</i>	reindeer moss	5
15	6/5/07				<i>Prunus serotina</i>	wild black cherry	5
15	6/5/07				bare ground		90
20	6/5/07	<i>Pinus banksiana</i>	jack pine	11	<i>Pteridium aquilinum</i>	bracken fern	25
20	6/5/07				<i>Cladonia rangiferina</i>	reindeer moss	5
20	6/5/07				<i>Vaccinium angustifolium</i>	blueberry	25
20	6/5/07				<i>Gaultheria procumbens</i>	wintergreen	5
20	6/5/07				<i>Poa sp.</i>	grass	5
20	6/5/07				bare ground		80
21	6/6/07	<i>Picea mariana</i>	black spruce	13	<i>Pteridium aquilinum</i>	bracken fern	5
21	6/6/07	<i>Pinus resinosa</i>	red pine	5	<i>Vaccinium angustifolium</i>	blueberry	20
21	6/6/07	<i>Pinus banksiana</i>	jack pine	7	<i>Cladonia rangiferina</i>	reindeer moss	5
21	6/6/07	<i>Acer rubrum</i>	red maple	10	<i>Epigaea repens</i>	trailing arbutus	5
21	6/6/07	<i>Amelanchier sp.</i>	serviceberry	1	bare ground		50
21	6/6/07	<i>Nemopanthus sp.</i>	holly	1	<i>Vaccinium myrtilloides</i>	Canada blueberry	15
21	6/6/07	<i>Pinus strobus</i>	white pine	1			
22	6/5/07	<i>Prunus serotina</i>	wild black cherry	18	<i>Pteridium aquilinum</i>	bracken fern	10
22	6/5/07	<i>Populus tremuloides</i>	quaking aspen	53	<i>Populus tremuloides</i>	quaking aspen	10
22	6/5/07	<i>Picea mariana</i>	black spruce	2	<i>Vaccinium angustifolium</i>	blueberry	40
22	6/5/07	<i>Pinus strobus</i>	white pine	4	<i>Danthonia spicata</i>	poverty grass	10
22	6/5/07	<i>Acer rubrum</i>	red maple	1	<i>Amelanchier sp.</i>	serviceberry	5
22	6/5/07	<i>Amelanchier sp.</i>	serviceberry	3	<i>Acer rubrum</i>	red maple	5
22	6/5/07				<i>Maianthemum canadense</i>	Canada mayflower	5
22	6/5/07				<i>Sphagnum sp.</i>	sphagnum moss	5
22	6/5/07				<i>Pinus strobus</i>	white pine	5
22	6/5/07				bare ground		55
23	6/5/07	<i>Pinus banksiana</i>	jack pine	19	<i>Pteridium aquilinum</i>	bracken fern	5
23	6/5/07	<i>Prunus serotina</i>	wild black cherry	24	<i>Deschampsia flexuosa</i>	hair grass	15
23	6/5/07	<i>Picea mariana</i>	black spruce	1	<i>Danthonia spicata</i>	poverty grass; oatgrass	10
23	6/5/07	<i>Betula papyrifera</i>	paper birch	2	<i>Sphagnum sp.</i>	sphagnum moss	5

Table 7-1a con't: Vegetative Survey Spring 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot Woody Species			Square Meter Plot Herbaceous Species		
		Scientific Name	Common Name	# Stems	Scientific Name	Common Name	% Cover
23	6/5/07	<i>Amelanchier</i> sp.	serviceberry	7	<i>Vaccinium myrtilloides</i>	Canada blueberry	10
23	6/5/07	<i>Prunus pensylvanica</i>	pin cherry	2	<i>Gaultheria procumbens</i>	wintergreen	5
23	6/5/07	<i>Acer rubrum</i>	red maple	8	bare ground		50
23	6/5/07	<i>Populus tremuloides</i>	quaking aspen	1			
23	6/5/07	<i>Abies balsamea</i>	balsam fir	1			
24	6/5/07	<i>Acer rubrum</i>	red maple	34	<i>Ledum groenlandicum</i>	bog Labrador tea	20
24	6/5/07	<i>Picea mariana</i>	black spruce	33	<i>Sphagnum</i> sp.	sphagnum moss	50
24	6/5/07	<i>Prunus serotina</i>	wild black cherry	2	<i>Vaccinium angustifolium</i>	blueberry	75
24	6/5/07	<i>Larix laricina</i>	tamarack	1	<i>Coptis trifolia</i>	goldthread	5
24	6/5/07	<i>Ledum groenlandicum</i>	bog Labrador tea	22	<i>Cornus canadensis</i>	bunchberry	5
24	6/5/07	<i>Nemopanthus mucronata</i>	mountain holly	2	<i>Clintonia borealis</i>	bluehead	5
24	6/5/07	<i>Amelanchier</i> sp.	serviceberry	8	<i>Ilex verticillata</i>	winterberry	5
24	6/5/07	<i>Abies balsamea</i>	balsam fir	3	<i>Carex</i> sp.	sedge	5
24	6/5/07	<i>Aronia prunifolia</i>	black chokeberry	1	<i>Kalmia polifolia</i>	swamp-laurel	5
24	6/5/07	<i>Pinus strobus</i>	white pine	1	<i>Amelanchier</i> sp.	serviceberry	5
24	6/5/07				<i>Cladonia rangiferina</i>	reindeer moss	5
24	6/5/07				bare ground		5
25	6/6/07	<i>Pinus banksiana</i>	jack pine	9	<i>Pteridium aquilinum</i>	bracken fern	20
25	6/6/07	<i>Picea mariana</i>	black spruce	11	<i>Vaccinium angustifolium</i>	blueberry	30
25	6/6/07	<i>Abies balsamea</i>	balsam fir	2	<i>Cladonia rangiferina</i>	reindeer moss	10
25	6/6/07	<i>Acer rubrum</i>	red maple	14	<i>Sphagnum</i> sp.	sphagnum moss	20
25	6/6/07	<i>Prunus serotina</i>	wild black cherry	4	<i>Acer rubrum</i>	red maple	5
25	6/6/07	<i>Pinus strobus</i>	white pine	5	bare ground		15
26	6/6/07	<i>Pinus banksiana</i>	jack pine	12	<i>Pteridium aquilinum</i>	bracken fern	30
26	6/6/07	<i>Acer rubrum</i>	red maple	17	<i>Cypripedium reginae</i>	showy lady's slipper	5
26	6/6/07	<i>Populus tremuloides</i>	quaking aspen	2	<i>Vaccinium angustifolium</i>	blueberry	20
26	6/6/07	<i>Pinus strobus</i>	white pine	5	bare ground		70
26	6/6/07	<i>Abies balsamea</i>	balsam fir	7	<i>Gaultheria procumbens</i>	wintergreen	5
26	6/6/07				<i>Deschampsia flexuosa</i>	hair grass	5
27	6/6/07	<i>Picea mariana</i>	black spruce	77	<i>Acer rubrum</i>	red maple	5
27	6/6/07	<i>Acer rubrum</i>	red maple	82	<i>Chamaedaphne calyculata</i>	leather leaf	5

Table 7-1a con't: Vegetative Survey Spring 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot			Square Meter Plot		
		Woody Species			Herbaceous Species		
		Scientific Name	Common Name	# Stems	Scientific Name	Common Name	% Cover
27	6/6/07	<i>Larix laricina</i>	tamarack	7	<i>Coptis trifolia</i>	goldthread	5
27	6/6/07	<i>Amelanchier</i> sp.	serviceberry	11	<i>Vaccinium angustifolium</i>	blueberry	5
27	6/6/07	<i>Alnus incana</i>	tag alder	29	<i>Sphagnum</i> sp.	sphagnum moss	100
27	6/6/07	<i>Nemopanthus mucronata</i>	mountain holly	12	<i>Gaultheria hispidula</i>	creeping snowberry	5
27	6/6/07	<i>Abies balsamea</i>	balsam fir	2	<i>Carex stricta</i>	sedge	20
27	6/6/07	<i>Betula papyrifera</i>	paper birch	1	<i>Iris versicolor</i>	wild blue flag	5
27	6/6/07	<i>Aronia prunifolia</i>	black chokeberry	1	<i>Ledum groenlandicum</i>	bog Labrador tea	5
27	6/6/07				<i>Amelanchier</i> sp.	serviceberry	5
27	6/6/07				<i>Cornus canadensis</i>	bunchberry	5
27	6/6/07				<i>Clintonia borealis</i>	bluehead	5
27	6/6/07				<i>Rubus hispidus</i>	swamp dewberry	5
27	6/6/07				<i>Gaultheria procumbens</i>	wintergreen	5
28	6/5/07	<i>Prunus serotina</i>	wild black cherry	23	<i>Trientalis borealis</i>	starflower	5
28	6/5/07	<i>Populus tremuloides</i>	quaking aspen	66	<i>Pteridium aquilinum</i>	bracken fern	5
28	6/5/07	<i>Pinus banksiana</i>	jack pine	7	<i>Danthonia spicata</i>	poverty grass	20
28	6/5/07	<i>Pinus resinosa</i>	red pine	8	<i>Vaccinium angustifolium</i>	blueberry	5
28	6/5/07	<i>Pinus strobus</i>	white pine	2	<i>Deschampsia flexuosa</i>	hair grass	50
28	6/5/07	<i>Amelanchier</i> sp.	serviceberry	21	bare ground		15
28	6/5/07	<i>Acer rubrum</i>	red maple	10			
28	6/5/07	<i>Prunus pennsylvanica</i>	pin cherry	1			
28	6/5/07	<i>Prunus virginiana</i>	choke cherry	6			
28	6/5/07	<i>Picea mariana</i>	black spruce	1			
29	6/5/07	<i>Picea mariana</i>	black spruce	18	<i>Cornus canadensis</i>	bunchberry	5
29	6/5/07	<i>Pinus strobus</i>	white pine	2	<i>Prunus serotina</i>	wild black cherry	5
29	6/5/07	<i>Acer rubrum</i>	red maple	15	<i>Vaccinium myrtilloides</i>	Canada blueberry	15
29	6/5/07	<i>Amelanchier</i> sp.	serviceberry	6	<i>Coptis trifolia</i>	goldthread	5
29	6/5/07	<i>Abies balsamea</i>	balsam fir	11	<i>Maianthemum canadense</i>	Canada mayflower	5
29	6/5/07	<i>Betula papyrifera</i>	paper birch	3	<i>Gaultheria procumbens</i>	wintergreen	5
29	6/5/07	<i>Prunus virginiana</i>	choke cherry	1	<i>Acer rubrum</i>	red maple	5
29	6/5/07	<i>Nemopanthus mucronata</i>	mountain holly	2	<i>Sphagnum</i> sp.	sphagnum moss	25
29	6/5/07	<i>Ledum groenlandicum</i>	bog Labrador tea	1	bare ground		25
29	6/5/07				<i>Abies balsamea</i>	balsam fir	5
29	6/5/07				<i>Vaccinium angustifolium</i>	blueberry	5

Table 7-1a con't: Vegetative Survey Spring 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot Woody Species			Square Meter Plot Herbaceous Species		
		Scientific Name	Common Name	# Stems	Scientific Name	Common Name	% Cover
30	6/6/07	<i>Abies balsamea</i>	balsam fir	16	<i>Acer rubrum</i>	red maple	10
30	6/6/07	<i>Acer rubrum</i>	red maple	10	<i>Coptis trifolia</i>	goldthread	5
30	6/6/07	<i>Betula papyrifera</i>	paper birch	1	<i>Cornus canadensis</i>	bunchberry	10
30	6/6/07	<i>Pinus strobus</i>	white pine	3	<i>Maianthemum canadense</i>	Canada mayflower	10
30	6/6/07	<i>Corylus cornuta</i>	beaked hazelnut	1	<i>Abies balsamea</i>	balsam fir	5
30	6/6/07				<i>Vaccinium myrtilloides</i>	Canada blueberry	10
30	6/6/07				bare ground		80
31	6/7/07	<i>Pinus banksiana</i>	jack pine	13	<i>Pteridium aquilinum</i>	bracken fern	25
31	6/7/07	<i>Betula papyrifera</i>	paper birch	4	<i>Maianthemum canadense</i>	Canada mayflower	5
31	6/7/07	<i>Picea mariana</i>	black spruce	15	<i>Vaccinium angustifolium</i>	blueberry	25
31	6/7/07	<i>Abies balsamea</i>	balsam fir	29	<i>Sphagnum sp.</i>	sphagnum moss	30
31	6/7/07	<i>Prunus serotina</i>	wild black cherry	13	<i>Deschampsia flexuosa</i>	hair grass	5
31	6/7/07	<i>Acer rubrum</i>	red maple	22	bare ground		35
31	6/7/07	<i>Populus tremuloides</i>	quaking aspen	3			

Table 7-1b: Vegetative Survey Fall 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot			Square Meter Plot		
		Woody Species			Herbaceous Species		
		Scientific Name	Common Name	# Stems	Scientific Name	Common Name	% Cover
1	9/11/07	<i>Pinus banksiana</i>	jack pine	18	<i>Pteridium aquilinum</i>	bracken fern	25
1	9/11/07	<i>Acer rubrum</i>	red maple	37	<i>Vaccinium sp.</i>	blueberry	50
1	9/11/07	<i>Pinus strobus</i>	white pine	1	<i>Ilex verticillata</i>	Michigan holly	15
1	9/11/07	<i>Picea mariana</i>	black spruce	10	<i>Acer rubrum</i>	red maple	5
1	9/11/07	<i>Amelanchier arborea</i>	juneberry	8	<i>Cladonia cristatella</i>	British soldiers lichen	5
1	9/11/07	<i>Abies balsamea</i>	balsam fir	8	<i>Lycopodium sp.</i>	clubmoss	5
1	9/11/07				<i>Epigaea repens</i>	trailing arbutus	5
2	9/12/07	<i>Pinus banksiana</i>	jack pine	1	<i>Maianthemum canadense</i>	Canada mayflower	5
2	9/12/07	<i>Picea mariana</i>	black spruce	18	<i>Epigaea repens</i>	trailing arbutus	20
2	9/12/07				<i>Vaccinium myrtilloides</i>	Canada blueberry	10
2	9/12/07				<i>Vaccinium angustifolium</i>	blueberry	10
2	9/12/07				<i>Panicum sp.</i>	panicgrass	5
2	9/12/07				<i>Cladonia cristatella</i>	British soldiers lichen	5
2	9/12/07				<i>Sphagnum sp.</i>	sphagnum moss	5
2	9/12/07				<i>Pteridium aquilinum</i>	bracken fern	5
2	9/12/07				<i>Deschampsia flexuosa</i>	hair grass	5
2	9/12/07				bare ground		10
3	9/12/07	<i>Pinus banksiana</i>	jack pine	31	<i>Vaccinium angustifolium</i>	blueberry	50
3	9/12/07	<i>Acer rubrum</i>	red maple	1	<i>Vaccinium myrtilloides</i>	Canada blueberry	20
3	9/12/07	<i>Amelanchier sp.</i>	serviceberry	1	<i>Pteridium aquilinum</i>	bracken fern	20
3	9/12/07				<i>Deschampsia flexuosa</i>	hair grass	5
3	9/12/07				<i>Apocynum androsaemifolium</i>	spreading dogbane	5
3	9/12/07				<i>Cladonia rangiferina</i>	reindeer moss	5
3	9/12/07				<i>Sphagnum sp.</i>	sphagnum moss	5
3	9/12/07				bare ground		25
3	9/12/07				<i>Epigea repens</i>	trailing arbutus	5
10	9/12/07	<i>Pinus strobus</i>	white pine	1	<i>Vaccinium myrtilloides</i>	Canada blueberry	5
10	9/12/07	<i>Picea mariana</i>	black spruce	19	<i>Gaultheria procumbens</i>	wintergreen	5
10	9/12/07	<i>Pinus banksiana</i>	jack pine	10	<i>Sphagnum sp.</i>	sphagnum moss	20
10	9/12/07	<i>Acer rubrum</i>	red maple	3	bare ground		40
10	9/12/07	<i>Amelanchier sp.</i>	serviceberry	1	<i>Vaccinium angustifolium</i>	blueberry	30
10	9/12/07				<i>Cladonia rangiferina</i>	reindeer moss	5

Table 7-1b con't: Vegetative Survey Fall 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot			Square Meter Plot		
		Woody Species			Herbaceous Species		
		Scientific Name	Common Name	# Stems	Scientific Name	Common Name	% Cover
10	9/12/07				<i>Pteridium aquilinum</i>	bracken fern	20
10	9/12/07				<i>Cladonia rangiferina</i>	reindeer moss	5
11	9/12/07	<i>Pinus banksiana</i>	jack pine	6	<i>Pinus banksiana</i>	jack pine	5
11	9/12/07				<i>Pteridium aquilinum</i>	bracken fern	10
11	9/12/07				<i>Carex</i> sp.	sedge	60
11	9/12/07				<i>Sphagnum</i> sp.	sphagnum moss	5
11	9/12/07				<i>Vaccinium angustifolium</i>	blueberry	40
11	9/12/07				bare ground		10
12	9/12/07	<i>Pinus banksiana</i>	jack pine	31	<i>Vaccinium myrtilloides</i>	Canada blueberry	55
12	9/12/07	<i>Picea mariana</i>	black spruce	17	<i>Vaccinium angustifolium</i>	blueberry	20
12	9/12/07	<i>Abies balsamea</i>	balsam fir	1	<i>Gaultheria procumbens</i>	wintergreen	20
12	9/12/07	<i>Acer rubrum</i>	red maple	9	<i>Pteridium aquilinum</i>	bracken fern	15
12	9/12/07	<i>Pinus strobus</i>	white pine	1	<i>Cladonia rangiferina</i>	reindeer moss	5
12	9/12/07				<i>Sphagnum</i> sp.	sphagnum moss	90
12	9/12/07				<i>Cladonia rangiferina</i>	reindeer moss	5
12	9/12/07				bare ground		10
13	9/12/07	<i>Pinus banksiana</i>	jack pine	29	<i>Vaccinium angustifolium</i>	blueberry	70
13	9/12/07	<i>Larix laricina</i>	tamarack	3	<i>Chamaedaphne calyculata</i>	leather leaf	10
13	9/12/07	<i>Picea mariana</i>	black spruce	35	<i>Sphagnum</i> sp.	sphagnum moss	100
14	9/12/07	<i>Pinus banksiana</i>	jack pine	12	<i>Pteridium aquilinum</i>	bracken fern	20
14	9/12/07	<i>Abies balsamea</i>	balsam fir	3	<i>Vaccinium angustifolium</i>	blueberry	65
14	9/12/07	<i>Picea mariana</i>	black spruce	15	<i>Epigaea repens</i>	trailing arbutus	10
14	9/12/07	<i>Salix humilis</i>	prairie willow	1	<i>Maianthemum canadense</i>	Canada mayflower	5
14	9/12/07				<i>Amelanchier</i> sp.	serviceberry	5
14	9/12/07				<i>Thuidium</i> sp.	moss	60
14	9/12/07				<i>Pinus banksiana</i>	jack pine	5
14	9/12/07				<i>Vaccinium myrtilloides</i>	Canada blueberry	5
14	9/12/07				<i>Poa</i> sp.	grass	5
14	9/12/07				<i>Lycopodium clavatum</i>	running clubmoss	5
14	9/12/07				<i>Hypnum</i> sp.	moss	15
14	9/12/07				bare ground		20

Table 7-1b con't: Vegetative Survey Fall 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot Woody Species			Square Meter Plot Herbaceous Species		
		Scientific Name	Common Name	# Stems	Scientific Name	Common Name	% Cover
15	9/12/07	<i>Pinus banksiana</i>	jack pine	35	<i>Pteridium aquilinum</i>	bracken fern	30
15	9/12/07	<i>Acer rubrum</i>	red maple	72	<i>Vaccinium angustifolium</i>	blueberry	10
15	9/12/07	<i>Salix sp.</i>	willow	1	<i>Vaccinium myrtilloides</i>	Canada blueberry	5
15	9/12/07	<i>Prunus serotina</i>	black cherry	1	<i>Cladonia rangiferina</i>	reindeer moss	5
15	9/12/07				<i>Thuidium sp.</i>	moss	5
15	9/12/07				<i>Cladonia rangiferina</i>	reindeer moss	5
15	9/12/07				bare ground		85
20	9/11/07	<i>Pinus banksiana</i>	jack pine	11	<i>Pteridium aquilinum</i>	bracken fern	40
20	9/11/07				<i>Cladonia rangiferina</i>	reindeer moss	5
20	9/11/07				<i>Vaccinium angustifolium</i>	blueberry	15
20	9/11/07				<i>Vaccinium myrtilloides</i>	Canada blueberry	15
20	9/11/07				<i>Gaultheria procumbens</i>	wintergreen	5
20	9/11/07				<i>Deschampsia flexuosa</i>	hair grass	10
20	9/11/07				<i>Hypnum sp.</i>	moss	10
20	9/11/07				bare ground		60
21	9/11/07	<i>Picea mariana</i>	black spruce	13	<i>Pteridium aquilinum</i>	bracken fern	25
21	9/11/07	<i>Pinus resinosa</i>	red pine	5	<i>Vaccinium angustifolium</i>	blueberry	45
21	9/11/07	<i>Pinus banksiana</i>	jack pine	7	<i>Cladonia rangiferina</i>	reindeer moss	15
21	9/11/07	<i>Acer rubrum</i>	red maple	10	<i>Epigaea repens</i>	trailing arbutus	15
21	9/11/07	<i>Amelanchier sp.</i>	serviceberry	1	bare ground		35
21	9/11/07	<i>Nemopanthus mucronata</i>	mountain holly	1	<i>Vaccinium myrtilloides</i>	Canada blueberry	5
21	9/11/07	<i>Pinus strobus</i>	white pine	1	<i>Deschampsia flexuosa</i>	hair grass	5
21	9/11/07				<i>Hypnum sp.</i>	moss	5
21	9/11/07				<i>Danthonia spicata</i>	poverty grass	5
22	9/11/07	<i>Prunus serotina</i>	wild black cherry	18	<i>Pteridium aquilinum</i>	bracken fern	50
22	9/11/07	<i>Populus tremuloides</i>	quaking aspen	53	<i>Populus tremuloides</i>	quaking aspen	5
22	9/11/07	<i>Picea mariana</i>	black spruce	2	<i>Vaccinium angustifolium</i>	blueberry	45
22	9/11/07	<i>Pinus strobus</i>	white pine	4	<i>Danthonia spicata</i>	poverty grass	5
22	9/11/07	<i>Acer rubrum</i>	red maple	1	<i>Amelanchier sp.</i>	serviceberry	5
22	9/11/07	<i>Amelanchier sp.</i>	serviceberry	3	<i>Acer rubrum</i>	red maple	5
22	9/11/07				<i>Pinus strobus</i>	white pine	5

Table 7-1b con't: Vegetative Survey Fall 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot			Square Meter Plot		
		Woody Species			Herbaceous Species		
		Scientific Name	Common Name	# Stems	Scientific Name	Common Name	% Cover
22	9/11/07				<i>Cladonia rangiferina</i>	reindeer moss	5
22	9/11/07				<i>Deschampsia flexuosa</i>	hair grass	5
22	9/11/07				<i>Gaultheria procumbens</i>	wintergreen	5
22	9/11/07				<i>Cladonia rangerifera</i>	reindeer moss	5
22	9/11/07				bare ground		50
23	9/10/07	<i>Pinus banksiana</i>	jack pine	19	<i>Pteridium aquilinum</i>	bracken fern	20
23	9/10/07	<i>Prunus serotina</i>	wild black cherry	24	<i>Festuca sp.</i>	fescue	15
23	9/10/07	<i>Picea mariana</i>	black spruce	1	<i>Danthonia spicata</i>	poverty grass	15
23	9/10/07	<i>Betula papyrifera</i>	paper birch	2	<i>Polytrichum juniperinum</i>	juniper polytrichum moss	5
23	9/10/07	<i>Amelanchier sp.</i>	serviceberry	7	<i>Vaccinium myrtilloides</i>	Canada blueberry	5
23	9/10/07	<i>Prunus pennsylvanica</i>	pin cherry	2	bare ground		50
23	9/10/07	<i>Acer rubrum</i>	red maple	8			
23	9/10/07	<i>Populus tremuloides</i>	quaking aspen	1			
23	9/10/07	<i>Abies balsamea</i>	balsam fir	1			
24	9/11/07	<i>Acer rubrum</i>	red maple	33	<i>Ledum groenlandicum</i>	bog Labrador tea	50
24	9/11/07	<i>Picea mariana</i>	black spruce	32	<i>Sphagnum sp.</i>	sphagnum moss	50
24	9/11/07	<i>Prunus serotina</i>	wild black cherry	3	<i>Vaccinium angustifolium</i>	blueberry	70
24	9/11/07	<i>Larix laricina</i>	tamarack	2	<i>Coptis trifolia</i>	goldthread	5
24	9/11/07	<i>Ledum groenlandicum</i>	bog Labrador tea	22	<i>Cornus canadensis</i>	bunchberry	5
24	9/11/07	<i>Nemopanthus mucronata</i>	mountain holly	2	<i>Clintonia borealis</i>	bluehead	5
24	9/11/07	<i>Amelanchier sp.</i>	serviceberry	8	<i>Ilex verticillata</i>	winterberry	5
24	9/11/07	<i>Abies balsamea</i>	balsam fir	5	<i>Carex sp.</i>	sedge	5
24	9/11/07	<i>Pinus strobus</i>	white pine	1	<i>Kalmia polifolia</i>	swamp-laurel	5
24	9/11/07				<i>Amelanchier sp.</i>	serviceberry	5
24	9/11/07				<i>Cladonia rangiferina</i>	reindeer moss	5
25	9/11/07	<i>Pinus banksiana</i>	jack pine	9	<i>Pteridium aquilinum</i>	bracken fern	30
25	9/11/07	<i>Picea mariana</i>	black spruce	11	<i>Vaccinium angustifolium</i>	blueberry	45
25	9/11/07	<i>Abies balsamea</i>	balsam fir	2	<i>Cladonia rangerifera</i>	lichen	15
25	9/11/07	<i>Acer rubrum</i>	red maple	14	<i>Hypnum sp.</i>	moss	5
25	9/11/07	<i>Prunus serotina</i>	wild black cherry	4	<i>Deschampsia flexuosa</i>	hair grass	5
25	9/11/07	<i>Pinus strobus</i>	white pine	5	<i>Thuidium sp.</i>	moss	5
25	9/11/07				<i>Epigaea repens</i>	trailing arbutus	5

Table 7-1b con't: Vegetative Survey Fall 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot Woody Species			Square Meter Plot Herbaceous Species		
		Scientific Name	Common Name	# Stems	Scientific Name	Common Name	% Cover
25	9/11/07				bare ground		15
26	9/11/07	<i>Pinus banksiana</i>	jack pine	12	<i>Pteridium aquilinum</i>	bracken fern	55
26	9/11/07	<i>Acer rubrum</i>	red maple	17	<i>Acer rubrum</i>	red maple	5
26	9/11/07	<i>Populus tremuloides</i>	quaking aspen	2	<i>Vaccinium angustifolium</i>	blueberry	50
26	9/11/07	<i>Pinus strobus</i>	white pine	5	bare ground		35
26	9/11/07	<i>Abies balsamea</i>	balsam fir	7	<i>Gaultheria procumbens</i>	wintergreen	5
26	9/11/07				<i>Deschampsia flexuosa</i>	hair grass	5
26	9/11/07				<i>Cypripedium acaule</i>	pink lady's slipper	5
27	9/11/07	<i>Picea mariana</i>	black spruce	77	<i>Acer rubrum</i>	red maple	5
27	9/11/07	<i>Acer rubrum</i>	red maple	82	<i>Chamaedaphne calyculata</i>	leather leaf	15
27	9/11/07	<i>Larix laricina</i>	tamarack	7	<i>Coptis trifolia</i>	goldthread	5
27	9/11/07	<i>Amelanchier sp.</i>	serviceberry	11	<i>Vaccinium angustifolium</i>	blueberry	5
27	9/11/07	<i>Alnus incana</i>	tag alder	29	<i>Sphagnum sp.</i>	sphagnum moss	90
27	9/11/07	<i>Nemopanthus mucronata</i>	mountain holly	13	<i>Gaultheria hispidula</i>	creeping snowberry	5
27	9/11/07	<i>Abies balsamea</i>	balsam fir	2	<i>Carex stricta</i>	sedge	40
27	9/11/07	<i>Betula papyrifera</i>	paper birch	1	<i>Iris versicolor</i>	wild blue flag	5
27	9/11/07	<i>Aronia prunifolia</i>	black chokeberry	1	<i>Ledum groenlandicum</i>	bog Labrador tea	5
27	9/11/07	<i>Ledum groenlandicum</i>	bog Labrador tea	1	<i>Cornus canadensis</i>	bunchberry	5
27	9/11/07				<i>Clintonia borealis</i>	bluehead	5
27	9/11/07				<i>Rubus hispidus</i>	swamp dewberry	5
27	9/11/07				<i>Gaultheria procumbens</i>	wintergreen	5
28	9/10/07	<i>Prunus serotina</i>	wild black cherry	23	<i>Trientalis borealis</i>	starflower	5
28	9/10/07	<i>Populus tremuloides</i>	quaking aspen	66	<i>Pteridium aquilinum</i>	bracken fern	15
28	9/10/07	<i>Pinus banksiana</i>	jack pine	7	<i>Danthonia spicata</i>	poverty grass	10
28	9/10/07	<i>Pinus resinosa</i>	red pine	8	<i>Vaccinium angustifolium</i>	blueberry	5
28	9/10/07	<i>Pinus strobus</i>	white pine	2	<i>Deschampsia flexuosa</i>	hair grass	70
28	9/10/07	<i>Amelanchier sp.</i>	serviceberry	21	bare ground		5
28	9/10/07	<i>Acer rubrum</i>	red maple	10	<i>Sphagnum sp.</i>	sphagnum moss	5
28	9/10/07	<i>Prunus pennsylvanica</i>	pin cherry	1	<i>Prunus pennsylvanica</i>	pin cherry	5
28	9/10/07	<i>Abies balsamea</i>	balsam fir	1			
28	9/10/07	<i>Prunus virginiana</i>	choke cherry	6			

Table 7-1b con't: Vegetative Survey Fall 2007 Sampling Point Data - Eagle Site

Sampling Point	Date	30-foot Radius Circular Plot Woody Species			Square Meter Plot Herbaceous Species		
		Scientific Name	Common Name	# Stems	Scientific Name	Common Name	% Cover
28	9/10/07	<i>Picea mariana</i>	black spruce	1			
29	9/10/07	<i>Picea mariana</i>	black spruce	18	<i>Cornus canadensis</i>	bunchberry	10
29	9/10/07	<i>Pinus strobus</i>	white pine	2	<i>Prunus serotina</i>	wild black cherry	5
29	9/10/07	<i>Acer rubrum</i>	red maple	15	<i>Vaccinium myrtilloides</i>	Canada blueberry	50
29	9/10/07	<i>Amelanchier sp.</i>	serviceberry	6	<i>Coptis trifolia</i>	goldthread	5
29	9/10/07	<i>Abies balsamea</i>	balsam fir	11	<i>Clintonia borealis</i>	bluebead-lily	5
29	9/10/07	<i>Betula papyrifera</i>	paper birch	3	<i>Gaultheria procumbens</i>	wintergreen	5
29	9/10/07	<i>Prunus virginiana</i>	choke cherry	1	<i>Pteridium aquilinum</i>	bracken fern	5
29	9/10/07	<i>Nemopanthus mucronata</i>	mountain holly	2	<i>Sphagnum sp.</i>	sphagnum moss	15
29	9/10/07	<i>Ledum groenlandicum</i>	bog Labrador tea	1	bare ground		40
29	9/10/07				<i>Abies balsamea</i>	balsam fir	5
30	9/11/07	<i>Abies balsamea</i>	balsam fir	16	<i>Acer rubrum</i>	red maple	15
30	9/11/07	<i>Acer rubrum</i>	red maple	10	<i>Coptis trifolia</i>	goldthread	10
30	9/11/07	<i>Betula papyrifera</i>	paper birch	1	<i>Cornus canadensis</i>	bunchberry	20
30	9/11/07	<i>Pinus strobus</i>	white pine	3	<i>Maianthemum canadense</i>	Canada mayflower	5
30	9/11/07	<i>Corylus cornuta</i>	beaked hazelnut	1	<i>Abies balsamea</i>	balsam fir	5
30	9/11/07				<i>Vaccinium myrtilloides</i>	Canada blueberry	25
30	9/11/07				bare ground		30
30	9/11/07				<i>Goodyera tasselata</i>	tasselated rattlesnake plantain	5
30	9/11/07				<i>Pteridium aquilinum</i>	bracken fern	5
31	9/11/07	<i>Pinus banksiana</i>	jack pine	11	<i>Pteridium aquilinum</i>	bracken fern	40
31	9/11/07	<i>Betula papyrifera</i>	paper birch	2	<i>Maianthemum canadense</i>	Canada mayflower	5
31	9/11/07	<i>Picea mariana</i>	black spruce	18	<i>Vaccinium angustifolium</i>	blueberry	25
31	9/11/07	<i>Abies balsamea</i>	balsam fir	23	<i>Thuidium sp.</i>	moss	15
31	9/11/07	<i>Prunus serotina</i>	wild black cherry	8	<i>Deschampsia flexuosa</i>	hair grass	5
31	9/11/07	<i>Acer rubrum</i>	red maple	25	bare ground		80
31	9/11/07	<i>Populus tremuloides</i>	quaking aspen	3			
31	9/11/07	<i>Amelanchier sp.</i>	serviceberry	1			
31	9/11/07	<i>Pinus strobus</i>	white pine	1			

Table 7-2a: Overall Plant List for Spring 2007 Kennecott Eagle Site Sampling Points

SCIENTIFIC NAME	ENGLISH NAME	NATIVE?	WETL. IND. CODE	WETL. IND. NO.	GROWTH HABIT	COEFF. OF CONSERV.
<i>Abies balsamea</i>	Balsam Fir	Yes	FACW	-3	Tree	3
<i>Acer rubrum</i>	Red Maple	Yes	FAC	0	Tree	1
<i>Amelanchier arborea</i>	Serviceberry	Yes	FACU	3	Tree	4
<i>Apocynum androsaemifolium</i>	Spreading Dogbane	Yes	[UPL]	5	Herb	3
<i>Aronia prunifolia</i> (<i>A. melanocarpa</i>)	Chokeberry	Yes	FACW-	-2	Shrub	5
<i>Betula papyrifera</i>	Paper Birch	Yes	FACU+	2	Tree	2
<i>Carex</i> sp.	Sedge	Yes			Herb	
<i>Carex stricta</i>	Strict Sedge	Yes	OBL	-5	Herb	4
<i>Chamaedaphne calyculata</i>	Leatherleaf	Yes	OBL	-5	Shrub	8
<i>Clintonia borealis</i>	Blue Beadlily	Yes	FAC+	-1	Herb	5
<i>Coptis trifolia</i>	Goldthread	Yes	FACW	-3	Herb	5
<i>Cornus canadensis</i>	Bunchberry; Dwarf Cornel	Yes	FAC	0	Herb	6
<i>Corylus cornuta</i>	Beaked Hazelnut	Yes	UPL	5	Shrub	5
<i>Cypripedium acaule</i>	Pink Lady-slipper	Yes	FACW	-3	Herb	5
<i>Danthonia spicata</i>	Poverty Grass	Yes	[UPL]	5	Herb	4
<i>Deschampsia flexuosa</i>	Flexed-awn Hair-grass	Yes	[UPL]	5	Herb	6
<i>Epigaea repens</i>	Trailing Arbutus	Yes	[UPL]	5	Herb	7
<i>Gaultheria hispidula</i>	Snowberry	Yes	FACW	-3	Herb	8
<i>Gaultheria procumbens</i>	Wintergreen	Yes	FACU	3	Herb	5
<i>Ilex verticillata</i>	Winterberry Holly	Yes	FACW+	-4	Shrub	5

Table 7-2a con't: Overall Plant List for Spring 2007 Kennecott Eagle Site Sampling Points

SCIENTIFIC NAME	ENGLISH NAME	NATIVE?	WETL. IND. CODE	WETL. IND. NO.	GROWTH HABIT	COEFF. OF CONSERV.
Iris versicolor	Varicolored Iris	Yes	OBL	-5	Herb	5
Kalmia polifolia	Swamp-laurel	Yes	OBL	-5	Shrub	10
Larix laricina	Tamarack	Yes	FACW	-3	Tree	5
Ledum groenlandicum	Labrador-Tea	Yes	OBL	-5	Shrub	8
Maianthemum canadense	Canada Mayflower	Yes	FAC	0	Herb	4
Nemopanthus mucronatus	Mountain Holly	Yes	OBL	-5	Shrub	7
Picea mariana	Black Spruce	Yes	FACW	-3	Tree	6
Pinus banksiana	Jack Pine	Yes	FACU	3	Tree	5
Pinus resinosa	Red Pine	Yes	FACU	3	Tree	6
Pinus strobus	White Pine	Yes	FACU	3	Tree	3
Populus tremuloides	Quaking Aspen	Yes	FAC	0	Tree	1
Prunus pensylvanica	Bird Cherry	Yes	FACU-	4	Tree	3
Prunus serotina	Black Cherry	Yes	FACU	3	Tree	2
Prunus virginiana	Choke Cherry	Yes	FAC-	1	Shrub	2
Pteridium aquilinum	Bracken Fern	Yes	FACU	3	Herb	0
Rubus hispidus	Swamp Dewberry	Yes	FACW	-3	Herb	4
Salix humilis	Prairie Willow	Yes	FACU	3	Shrub	4
Salix sp.	Willow	No	[FACW]	-3	Shrub	3
Trientalis borealis	Starflower	Yes	FAC+	-1	Herb	5
Vaccinium angustifolium	Low Sweet Blueberry	Yes	FACU	3	Shrub	4

Table 7-2a con't: Overall Plant List for Spring 2007 Kennecott Eagle Site Sampling Points

SCIENTIFIC NAME	ENGLISH NAME	NATIVE?	WETL. IND. CODE	WETL. IND. NO.	GROWTH HABIT	COEFF. OF CONSERV.
Vaccinium myrtilloides	Myrtle Blueberry	Yes	FACW-	2	Herb	4
Count: 41			Average: -0.03			Average: 4.6

Table 7-2b: Overall Plant List for Fall 2007 Kennecott Eagle Site Sampling Points

SCIENTIFIC NAME	ENGLISH NAME	NATIVE?	WETL. IND. CODE	WETL. IND. NO.	GROWTH HABIT	COEFF. OF CONSERV.
<i>Abies balsamea</i>	Balsam Fir	Yes	FACW	-3	Tree	3
<i>Acer rubrum</i>	Red Maple	Yes	FAC	0	Tree	1
<i>Amelanchier arborea</i>	Serviceberry	Yes	FACU	3	Tree	4
<i>Apocynum androsaemifolium</i>	Spreading Dogbane	Yes	[UPL]	5	Herb	3
<i>Betula papyrifera</i>	Paper Birch	Yes	FACU+	2	Tree	2
<i>Carex</i> sp.	Sedge	Yes			Herb	
<i>Carex stricta</i>	Strict Sedge	Yes	OBL	-5	Herb	4
<i>Chamaedaphne calyculata</i>	Leatherleaf	Yes	OBL	-5	Shrub	8
<i>Clintonia borealis</i>	Blue Beadlily	Yes	FAC+	-1	Herb	5
<i>Coptis trifolia</i>	Goldthread	Yes	FACW	-3	Herb	5
<i>Cornus canadensis</i>	Bunchberry; Dwarf Cornel	Yes	FAC	0	Herb	6
<i>Corylus cornuta</i>	Beaked Hazelnut	Yes	UPL	5	Shrub	5
<i>Cypripedium acaule</i>	Pink Lady-slipper	Yes	FACW	-3	Herb	5
<i>Danthonia spicata</i>	Poverty Grass	Yes	[UPL]	5	Herb	4
<i>Deschampsia flexuosa</i>	Flexed-awn Hair-grass	Yes	[UPL]	5	Herb	6
<i>Epigaea repens</i>	Trailing Arbutus	Yes	[UPL]	5	Herb	7
<i>Gaultheria hispidula</i>	Snowberry	Yes	FACW	-3	Herb	8
<i>Gaultheria procumbens</i>	Wintergreen	Yes	FACU	3	Herb	5
<i>Goodyera tessellata</i>	Checkered Rattlesnake-plantain	Yes	FACU	3	Herb	6
<i>Ilex verticillata</i>	Winterberry Holly	Yes	FACW+	-4	Shrub	5

Table 7-2b con't: Overall Plant List for Fall 2007 Kennecott Eagle Site Sampling Points

SCIENTIFIC NAME	ENGLISH NAME	NATIVE?	WETL. IND. CODE	WETL. IND. NO.	GROWTH HABIT	COEFF. OF CONSERV.
Iris versicolor	Varicolored Iris	Yes	OBL	-5	Herb	5
Kalmia polifolia	Swamp-laurel	Yes	OBL	-5	Shrub	10
Larix laricina	Tamarack	Yes	FACW	-3	Tree	5
Ledum groenlandicum	Labrador-Tea	Yes	OBL	-5	Shrub	8
Lycopodium clavatum	Running Clubmoss	Yes	FAC	0	Herb	4
Maianthemum canadense	Canada Mayflower	Yes	FAC	0	Herb	4
Nemopanthus mucronatus	Mountain Holly	Yes	OBL	-5	Shrub	7
Picea mariana	Black Spruce	Yes	FACW	-3	Tree	6
Pinus banksiana	Jack Pine	Yes	FACU	3	Tree	5
Pinus resinosa	Red Pine	Yes	FACU	3	Tree	6
Pinus strobus	White Pine	Yes	FACU	3	Tree	3
Populus tremuloides	Quaking Aspen	Yes	FAC	0	Tree	1
Prunus pensylvanica	Bird Cherry	Yes	FACU-	4	Tree	3
Prunus serotina	Black Cherry	Yes	FACU	3	Tree	2
Prunus virginiana	Choke Cherry	Yes	FAC-	1	Shrub	2
Pteridium aquilinum	Bracken Fern	Yes	FACU	3	Herb	0
Rubus hispidus	Swamp Dewberry	Yes	FACW	-3	Herb	4
Salix humilis	Prairie Willow	Yes	FACU	3	Shrub	4
Trientalis borealis	Starflower	Yes	FAC+	-1	Herb	5
Vaccinium angustifolium	Low Sweet Blueberry	Yes	FACU	3	Shrub	4

Table 7-2b con't: Overall Plant List for Fall 2007 Kennecott Eagle Site Sampling Points

SCIENTIFIC NAME	ENGLISH NAME	NATIVE?	WETL. IND. CODE	WETL. IND. NO.	GROWTH HABIT	COEFF. OF CONSERV.
Vaccinium myrtilloides	Myrtle Blueberry	Yes	FACW-	2	Herb	4
Count: 41			Average:	0.18		Average: 4.6

WETLAND POINT PHOTOGRAPHS



Photos 1 and 2:



1W View North



1W View South



Photos 3 and 4:



6W View North



6W View South



Photos 5 and 6:



7W View North



7W View South



Photos 7 and 8:



Photos 9 and 10:



Photos 11 and 12:



10W View North



10W View South



Photos 13 and 14:



11W View North



11W View South



Photos 15 and 16:



12W View North



12W View South



Photos 17 and 18:



13W View North



13W View South



Photos 19 and 20:



26W North View



26W South View



VEGETATIVE SAMPLING POINT PHOTOGRAPHS



Photos 1 and 2:



1 View North – June 2007



1 View South – June 2007



Photos 3 and 4:



2 View North – June 2007



2 View South – June 2007



Photos 5 and 6:



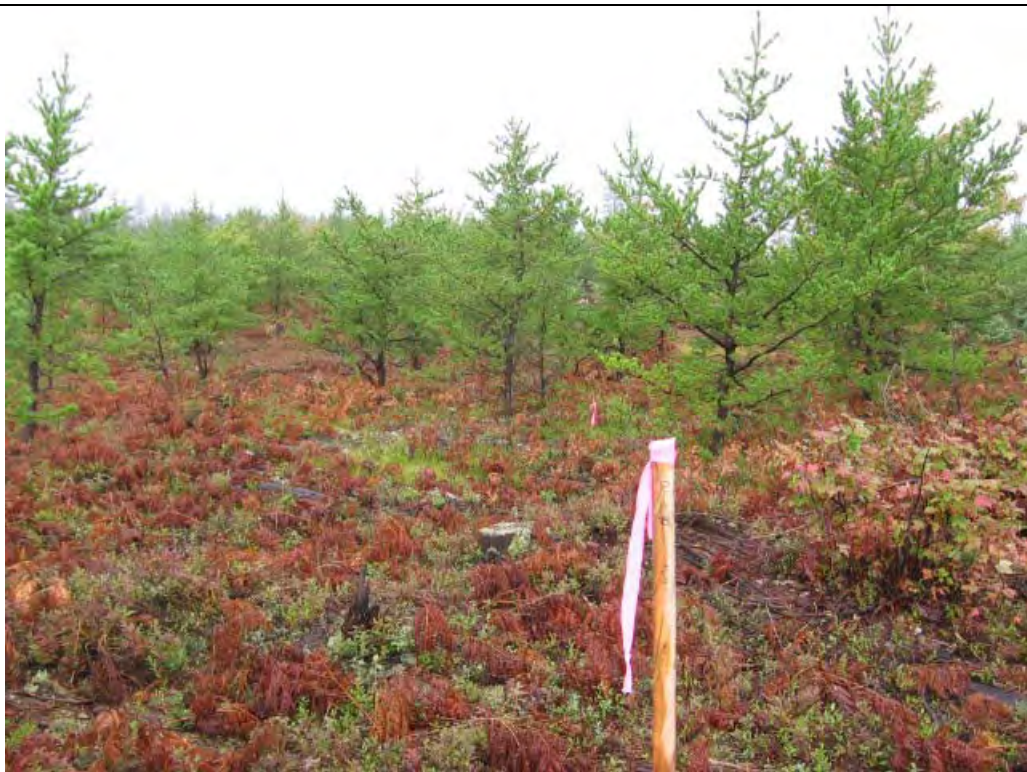
3 View North – September 2007



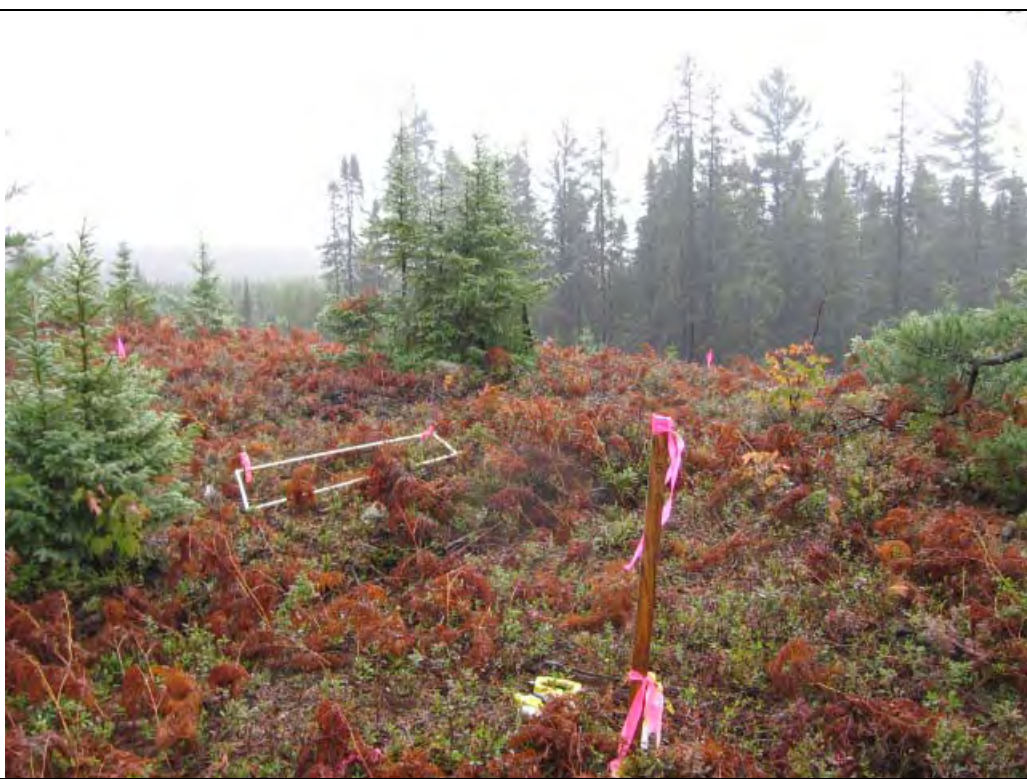
3 View South – September 2007



Photos 7 and 8:



10 View North – September 2007



10 View South – September 2007



Photos 9 and 10:



11 View North – June 2007



11 View South – June 2007



Photos 11 and 12:



12 View North – September 2007



12 View South – September 2007



Photos 13 and 14:



13 View North – September 2007



13 View South – September 2007



Photos 15 and 16:



14 View North – June 2007



14 View South – June 2007



Photos 17 and 18:



15 View North – June 2007



15 View South – June 2007



Photos 19 and 20:



20 View North – June 2007



20 View South – June 2007



Photos 21 and 22:



21 View North – June 2007



21 View South – June 2007



Photos 23 and 24:



22 View North – June 2007



22 View South – June 2007



Photos 25 and 26:



23 View North – June 2007



23 View South – June 2007



Photos 27 and 28:



24 View North – September 2007



24 View South – September 2007



Photos 29 and 30:



25 View North – June 2007



25 View South – June 2007



Photos 31 and 32:



26 View North – June 2007



26 View South – June 2007



Photos 33 and 34:



27 View North – June 2007



27 View South – June 2007



Photos 35 and 36:



28 View North – June 2007



28 View South – June 2007



Photos 37 and 38:



29 View North – June 2007



29 View South – June 2007



Photos 39 and 40:



30 View North – September 2007



30 View South – September 2007



Photos 41 and 42:



31 View North – September 2007



31 View South – September 2007

