

APPENDIX B
WILDLIFE HABITAT FEATURE
OBSERVATIONS

October 21, 2016

Appendix B: Wildlife Habitat Features

Appendix B Wildlife Habitat Features

Feature	Transect	UTM			Species	Observation	KP Range
		Zone	Easting	Northing			
WHF1	11	10	550829	6167756	Western toad	Potential amphibian breeding site (Photograph 13). Small riparian area tapering into low-flow wetted area.	Ancillary feature near KP 0.5, site is approximately 300 m northwest of KP 1
WHF2	1	10	552045	6167462	American black bear	Bear den (Photograph 9). One weathered hair was observed snagged at the top of the den entrance, and a game trail lead to the den. Den faced east at the top of a steep slope. Den entrance was 70 cm wide by 50 cm high. Den was 1 m deep, 60 cm high, and 2 m wide. Most likely black bear given low altitude and abundance of black bears in the area.	KP 2.5
PDA02	1	10	552696	6166861	Western toad	Probable toad tadpoles in flooded oxbow lake on June 28	KP 3
TRUS	N/A	10	553180	6166852	Trumpeter swan	Pair of swan on wetland, June 28	KP 3
WHF3	2	10	553324	6167019	Bank swallow	Bank swallow colony (Photograph 12). Six adults flying in and out of holes	KP 3 - KP 4
WHF4	14	10	559762	6162905	Western toad	Potential amphibian breeding site (Photograph 17): Ephemeral floodplain with willow and sedge.	KP 13 Drag area, site is approximately 786 m southwest of KP 12
WHF5	14	10	559790	6162812	Western toad	Potential amphibian breeding site (Photograph 18): Low-flow channel with likelihood for pooling of water during spring	KP 13 Drag area, site is approximately 900 m southwest of KP 12
WHF6	14	10	560068	6162802	Western toad	Potential amphibian breeding site: Low-flow channel with likelihood for pooling of water during spring	KP 13 drag area, site is approximately 940 m southwest of KP 12

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Feature	Transect	UTM			Species	Observation	KP Range
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WHF7	14	10	560557	6162697	Western toad	Potential amphibian breeding site: Low-lying area with standing water	KP 13 drag area, site is approximately 150 m west of KP 13
WHF8	4	10	560770	6162659	Western toad	Potential amphibian breeding site (Photographs 4 and 14): Very large wetland complex on the west side of the Pine River. This large wetland area includes: three swamp horsetail - beaked sedge marsh communities, two Bebb's willow - bluejoint swamp communities; one beaked sedge - water sedge marsh community with a large open water area; and one mountain alder - Bebb's willow - bluejoint swamp community.	KP 13 - KP 14
TRUS	N/A	10	561027	6162589	Trumpeter swan	Breeding site; pair with 3 very young cygnets on June 14	KP 13
WHF9	5	10	561235	6162621	Fisher	Potential Fisher Den (Photograph 11) in a cottonwood tree, diameter at breast height was approximately 80 cm. The cavity opening was approximately 15 cm in diameter and located 3 m above the ground. Bits of bark have come off the tree in a line between the ground and the cavity, possibly as a result of a fisher climbing up and down the tree.	KP 13.5
WHF10	6	10	562395	6162469	Western toad	Potential amphibian breeding site (Photograph 15): Swamp horsetail - beaked sedge / open water marsh on near the east side of the Pine River	KP 14.8

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Feature	Transect	UTM			Species	Observation	KP Range
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WHF11	N/A: found during soil survey.	10	563987	6162635	American black bear	Potential black bear den (Photograph 10): Den has two openings; one approximately 45 cm x 45 cm the other 60 cm x 45 cm. The den is approximately 90 cm deep. This den may have originally been dug by a different mammal, as bears do not typically dig exits, though the den is just large enough that a small black bear could make use of it.	KP 17
WHF12	7	10	565987	6163198	Western toad	Potential amphibian breeding site: Small anthropogenic pond	KP 18.5
WHF13	7	10	566092	6163215	Western toad	Potential amphibian breeding site (Photograph 16): Bebb's willow - bluejoint Swamp	KP 18.6
WHF14	27	10	566537	6163168	Western toad	Potential amphibian breeding site: Bebb's willow - bluejoint Swamp	Ancillary feature approximately 350 m northeast of KP 19; extends to 180 m northeast of KP 19
WHF15	8	10	567169	6163045	Western toad	Potential amphibian breeding site: Bebb's willow - bluejoint Swamp	KP 19.8
WHF16	8	10	567498	6163092	Western toad	Potential amphibian breeding site: Bebb's willow - bluejoint Swamp	KP 20.2
WHF17	8	10	567974	6163249	Western toad	Potential amphibian breeding site: Bebb's willow - bluejoint Swamp	KP 20.6
WHF18	8	10	568035	6163204	Western toad	Potential amphibian breeding site: Bebb's willow - bluejoint Swamp	KP 20.7

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WHF19	8	10	568184	6163230	Western toad	Potential amphibian breeding site: Beaked sedge - water sedge / cattail marsh	KP 20.9
WHF20	17	10	568339	6163525	Swallow species	Potential for cavity nesting swallows	Footprint Extension near KP 21
WHF21	17	10	568463	6163602	Raptor or corvid species	Unknown stick nest. This nest was at least 100 m northeast of the centerline, and could not be safely accessed due to steep slope. This nest may just be from a corvid species.	Footprint Extension near KP 21
WHF22	9	10	568716	6163495	Western toad	Potential amphibian breeding site: Mountain alder - Bebb's willow - bluejoint Swamp	KP 21.5
WHF23	10	10	570815	6163884	Western toad	Potential amphibian breeding site: Mountain alder - Bebb's willow - bluejoint Swamp	KP 23.6
Den	N/A	10	571197	6164885	Fisher	Potential fisher/marten den in a tree cavity in a dead, topless, standing cottonwood. Tree diameter at breast height is ~40cm. Cavity opening is ~10cm diameter and is ~10m above ground. No tracks, trails or other signs of use.	KP 24.8
Mineral lick	N/A	10	571273	6164602	Ungulates	Wet, muddy mineral lick with seepage. Several trails to site. Older tracks in mud, but no fresh tracks.	KP 24.8

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Den	N/A	10	571566	6164563	Fisher	Potential fisher den in a tree cavity located in a dead, topless, standing cottonwood tree. Tree diameter at breast height is ~100cm. Cavity opening is ~12cm in diameter and is ~3m above ground. There are game trails in the general area, but no tracks, trails, scat or other sign near the denning tree.	KP 25.1
Nest	N/A	10	571694	6164587	Raptor	Stick nest located in a live aspen tree. No adults or juveniles present. Tree diameter at breast height is ~50cm. Nest is located in the canopy ~ 25m above ground. Nest appears to be in good shape.	KP 25.2
Mineral lick	N/A	10	572771	6163745	Ungulates, deer	Small mineral lick in form of wet mud depression; deer tracks and 4 lightly used trails leading to depression	KP 26

APPENDIX C

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Feature	Date	Transect	UTM			Species	Observation	KP Range
			Zone	Easting	Northing			
I1	Sep 23, 2015	1	10	550236	6167514	White-tailed deer	White-tailed deer was observed crossing the ROW	KP 0 - 1
I2	Sep 23, 2015	1	10	550569	6167561	Ungulate	Several game beds, most likely white-tailed deer as this species frequently beds in groups.	KP 0 - 1
I3	Sep 23, 2015	1	10	550762	6167452	Ungulate	Artificial mineral lick, presumably planted by hunters to lure ungulates. Several game trails lead to the lick.	KP 0 - 1
I4	Sep 23, 2015	1	10	550819	6167440	Ungulate or bear	Game bed	KP 0 - 1
I5	Sep 23, 2015	1	10	550973	6167336	Ungulate or bear	Game bed	KP 1 - KP 2
I6	Sep 23, 2015	1	10	550975	6167508	Ungulate or bear	Game trail	KP 1 - KP 2
I7	Sep 23, 2015	1	10	551013	6167334	Elk	Game trail with elk scat	KP 1 - KP 2
I8	Sep 23, 2015	1	10	551087	6167375	Woodpecker or other cavity nesting bird	Wildlife Tree (Photograph 19)	KP 1 - KP 2
I9	Sep 23, 2015	1	10	551145	6168749	Bear	Rocky outcrop with potential for bear denning. No dens were observed.	KP 1 - KP 2
I10	Sep 23, 2015	1	10	551148	6167377	American marten	Potential Marten resting site (Photograph 21)	KP 1 - KP 2
I11	Sep 23, 2015	1	10	551220	6167392	Ungulate or bear	Game trail leading east-west	KP 1 - KP 2
I12	Sep 23, 2015	1	10	551463	6167509	Bear	Bear sign: rotten log pulled apart, most likely by bear feeding on insects.	KP 1 - KP 2
I13	Sep 23, 2015	1	10	551478	6167520	Ungulate or bear	Game bed	KP 1 - KP 2

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Feature	Date	Transect	UTM			Species	Observation	KP Range
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114	Sep 23, 2015	1	10	551739	6167435	Woodpecker or other cavity nesting bird and sapsucker species	Wildlife tree with cavities and sapsucker feeding holes (Photograph 20)	KP 1 - KP 2
115	Sep 23, 2015	1	10	551744	6167432	Sapsucker	Wildlife tree with sapsucker feeding holes	KP 1 - KP 2
116	Sep 23, 2015	1	10	551836	6167424	Woodpecker	Wildlife tree with nesting or denning cavity. This cavity had a diameter greater than 10 cm, making it large enough for fisher. However, no scratch marks were observed on the tree trunk, and this is not riparian habitat. This is not likely to have been used as by fisher, and is most likely from a pileated woodpecker.	KP 1 - KP 2
117	Sep 23, 2015	1	10	551839	6167421	Woodpecker	Wildlife tree with nesting cavities	KP 1 - KP 2
118	Sep 23, 2015	1	10	551904	6167411	Woodpecker or other cavity nesting bird and sapsucker species	Wildlife tree with sapsucker and woodpecker feeding holes	KP 1 - KP 2
119	Sep 23, 2015	1	10	551910	6167416	American marten	Potential Marten resting site	KP 1 - KP 2
120	Sep 23, 2015	1	10	551949	6167448	Woodpecker or other cavity nesting bird, sapsucker.	Wildlife tree with woodpecker and sapsucker feeding holes.	KP 1 - KP 2
121	Sep 23, 2015	1	10	551978	6167436	Sapsucker	Wildlife tree with sapsucker feeding holes.	KP 2 - KP 3
122	Sep 23, 2015	2	10	551986	6167441	Ungulate or bear	Game bed	KP 2 - KP 3
123	Sep 23, 2015	2	10	552051	6167455	Deer	Deer track	KP 2 - KP 3

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Feature	Date	Transect	UTM			Species	Observation	KP Range
			Zone	Easting	Northing			
I24	Sep 23, 2015	2	10	552086	6167437	Ungulate or bear	Game trail	KP 2 - KP 3
I25	Sep 23, 2015	2	10	552295	6167372	American black bear	The crew had a black bear encounter near this location. The bear was not behaving aggressively.	KP 2 - KP 3
I26	Sep 23, 2015	2	10	552376	6167447	Fisher	Riparian habitat with cottonwoods and aspen 30 cm dbh. Small stream. Potential for fisher.	KP 2 - KP 3
I27	Sep 24, 2015	3	10	554502	6167049	Woodpecker or other cavity nesting bird	Wildlife tree with nesting cavities	KP 4 - KP 5
I28	Sep 24, 2015	3	10	554886	6166930	Ungulate or bear	Game trail	KP 5 - KP 6
I29	Sep 24, 2015	3	10	555073	6166936	American marten	Old marten trap (Photograph 22)	KP 5 - KP 6
I30	Sep 24, 2015	3	10	555164	6166912	Bear	Rotten log pulled apart, most likely by a bear feeding on insects.	KP 5 - KP 6
I31	Sep 24, 2015	3	10	555420	6166849	Bear	Cluster of bear-scratched and antler-rubbed trees (Photograph 23)	KP 5 - KP 6
I32	Sep 24, 2015	3	10	556128	6166539	Bear	Bear scratched trees	KP 6 - KP 7
I33	Sep 24, 2015	3	10	556144	6166559	Ungulate or bear	Game trail	KP 6 - KP 7
I34	Sep 24, 2015	3	10	556258	6166441	Woodpecker or other cavity nesting bird	Wildlife tree	KP 6 - KP 7
I35	Sep 24, 2015	3	10	556268	6166441	Woodpecker or other cavity nesting bird	Wildlife tree	KP 6 - KP 7
I36	Sep 24, 2015	3	10	556428	6166323	Ungulate or bear	Game trail	KP 6 - KP 7

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Feature	Date	Transect	UTM			Species	Observation	KP Range
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137	Sep 24, 2015	3	10	556450	6166137	Deer	Antler rub on tree. The rub is less than 1 m from the ground, suggesting deer rather than moose or elk (Photograph 24).	KP 6 - KP 7
138	Sep 24, 2015	3	10	556638	6165971	Woodpecker or other cavity nesting bird	Wildlife tree	KP 7 - KP 8
139	Sep 25, 2015	4	10	557827	6165400	Ungulate or bear	Game trail	KP 8 - KP 9
140	Sep 25, 2015	4	10	558031	6165379	American black bear	Heavy bear sign between KP 8 and 9 - scat, scratched trees, and evidence of feeding on rotten logs.	KP 8 - KP 10
141	Sep 25, 2015	4	10	558919	6165135	Moose	Moose femur	KP 9 - KP 10
142	Sep 25, 2015	4	10	559942	6164085	Woodpecker or other cavity nesting bird	Wildlife tree	KP 11 - KP 12
143	Sep 25, 2015	4	10	560405	6163695	Bear	Rocky outcrop with potential for bear denning. No dens were observed.	KP 11 - KP 12
144	Sep 25, 2015	4	10	561003	6162544	Ungulate or bear	Game trail	KP 13 - KP 14
145	Sep 25, 2015	4	10	561075	6162449	Fisher	Riparian habitat with cottonwoods and aspen 30 cm dbh. Small stream. Potential for fisher.	KP 13 - KP 14
146	Sep 27, 2015	5	10	561246	6162504	Beaver	Beaver lodge on back channel of the Pine River (Photograph 25)	KP 13 - KP 14
147	Sep 26, 2015	6	10	561837	6162460	Ungulate or bear	Game trail	KP 14 - KP 15

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148	Sep 26, 2015	6	10	561837	6162460	Ungulate or bear	Game trail	KP 14 - KP 15
149	Sep 26, 2015	6	10	562403	6162436	Bear	Bear scratched trees (Photograph 26)	KP 14 - KP 15
150	Sep 26, 2015	6	10	562477	6162441	Woodpecker or other cavity nesting bird	Cluster of wildlife trees with nesting cavities and feeding holes	KP 14 - KP 15
151	Sep 26, 2015	6	10	562629	6162453	Woodpecker or other cavity nesting bird	Wildlife tree with a nesting cavity (Photograph 27)	KP 15 - KP 16
152	Sep 26, 2015	6	10	562957	6162517	Ungulate or bear	Game trail	KP 15 - KP 16
153	Sep 26, 2015	6	10	563565	6162668	Moose	Moose pelvis (Photograph 28)	KP 16 - KP 17
154	Sep 26, 2015	6	10	563919	6162726	Elk	Elk antler	KP 16 - KP 17
155	Sep 26, 2015	6	10	563990	6162635	American marten	Small den; possibly marten resting site or fox or coyote. Observed by veg/soil crew, needs to be verified (Photograph 29)	KP 16 - KP 17
156	Sep 26, 2015	NA	10	564092	6162974	Grizzly bear	Grizzly bear observation. The bear was standing on a minor dirt road near a land-owner's fence. The bear loped away into adjacent broadleaf open forest when the field crew approached in a truck	KP 16 - KP 17
157	Sep 26, 2015	7	10	564980	6162861	Woodpecker or other cavity nesting bird	Wildlife Tree with small cavity	KP 17 - KP 18

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158	Sep 26, 2015	7	10	564989	6162924	Woodpecker	Small riparian stand of old cottonwoods with several wildlife trees. Too close to human development to be good fisher habitat	KP 17 - KP 18
159	Sep 26, 2015	8	10	567303	6163013	Black-billed magpie	Small stick nest, most likely black-billed magpie (Photograph 30)	KP 19 - KP 20
160	Sep 26, 2015	8	10	567482	6163083	Ungulate or bear	Game trail	KP 20 - KP 21
161	Sep 26, 2015	8	10	567557	6163173	American crow	Small stick nest, most likely crow (Photograph 31)	KP 20 - KP 21
162	Sep 26, 2015	8	10	567567	6163095	American crow	Small stick nest, most likely crow or black-billed magpie	KP 20 - KP 21
163	Sep 26, 2015	8	10	567806	6163151	Common raven	Small stick nest, most likely common raven	KP 20 - KP 21
164	Sep 27, 2015	9	10	568745	6163492	Songbird species	Two inactive songbird nests (e.g. Photograph 32)	KP 21 - KP 20
165	Sep 27, 2015	5	10	573147	6164181	Woodpecker	Cluster of four wildlife trees	KP 26 - KP 26.8
166	Sep 27, 2015	10	10	573336	6164187	Bear	Large anthill with evidence of bears feeding. There were five of these between KP 26.5 and 26.	KP 26 - KP 26.8
167	Sep 27, 2015	10	10	573456	6164197	Bear	Rotten log with evidence of a bear feeding on insects within it.	KP 26 - KP 26.8

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168	Sep 27, 2015	10	10	573638	6164267	Deer and American black bear	Game trail running east to west along a side slope. Identifiable tracks were deer, though several piles of bear scat were also observed along the trail.	KP 26 - KP 26.8
169	Sep 27, 2015	10	10	550435	6167526	Woodpecker or other cavity nesting bird	Tree with a cavity	Access Road near KP 0
170	Oct 16, 2015	13	10	553169	6167351	Mustellid species	Small den - possibly marten or other mustelid	Footprint Extension Area near KP 03
171	Oct 16, 2015; Jun 14, 2016	13	10	553303	6167023	Bank swallow	Cavity nesting signs on cutbank in October; 6 adults flying in and out of holes in June	Footprint Extension Area near KP 2.75, north of ROW
172	Oct 16, 2015	20	10	553568	6166854	Woodpecker or other cavity nesting bird	Tree with a cavity	Access Road near KP 3
173	Oct 16, 2015	30	10	553637	6166833	N/A	Sink hole	Access Road near KP 22.5
174	Oct 16, 2015	22	10	557404	6165648	Ruffed grouse	Ruffed grouse observed	Access Road near KP 08

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175	Oct 16, 2015	32	10	573794	6164342	Woodpecker or other cavity nesting bird	Tree with a cavity	Access Road near KP 26
176	Oct 16, 2015	32	10	573806	6164369	Woodpecker or other cavity nesting bird	Tree with a cavity	Access Road near KP 26
Beaver	Jun 30, 2016	N/A	10	552665	6166849	Beaver	Swimming in oxbow lake	KP 3
Moose	Jun 28, 2016	N/A	10	561246	6162504	Moose	Calf carcass, bones and hide left, smelly	KP 13 – KP 14
Elk	Jun 14, 2016	N/A	10	571507	6163819	Elk and black bear	Cow calling (distress call), possibly to her calf; black bear also seen here, possibly stalking them	KP 24 – KP 25
Mineral lick	Jun 14, 2016	N/A	10	572771	6163745	Ungulates, deer	Small mineral lick; wet mud depression with deer tracks and trails leading to it	KP 26

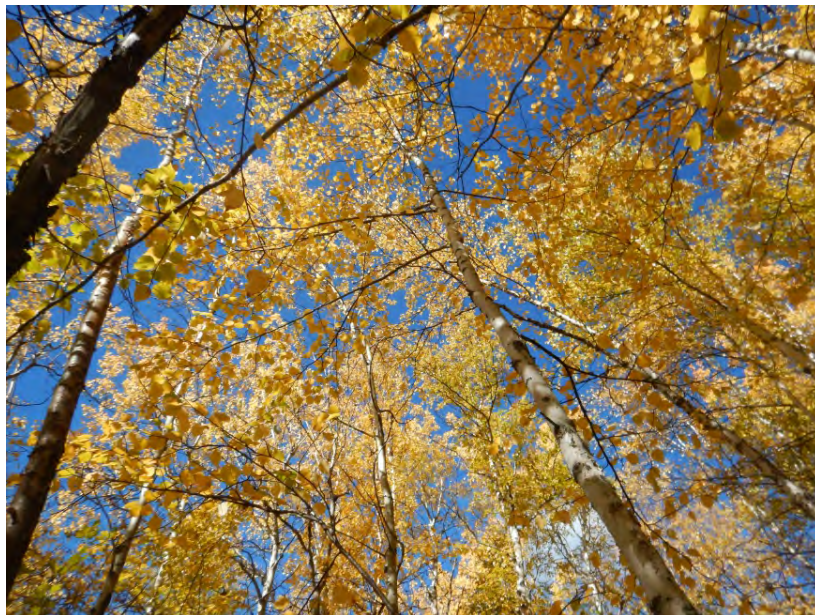
APPENDIX D

PHOTOS

Appendix D: Photographs



Photograph 1 **Mixed-wood open forest habitat near KP 2.5**



Photograph 2 **Broadleaf open forest habitat near KP 8**

Appendix D: Photographs



Photograph 3 **Riparian habitat at a side channel of the Pine River near KP 13.5**



Photograph 4 **Wetland habitat near KP 13**

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Photograph 5 **Tall shrub habitat near KP 4**



Photograph 6 **Low shrub habitat near KP 14**

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Appendix D: Photographs



Photograph 7 Pasture near KP 20

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Photograph 8 **Cattle in the study area near KP 6**

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Photograph 9 American black bear den near KP 2.5, looking west



Photograph 10 Potential American black bear den near KP 17

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Photograph 11 Potential Fisher den, looking northwest

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Photograph 12 Potential swallow colony near KP 3.5 looking east



Photograph 13 Potential amphibian breeding habitat near KP 0.5

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Photograph 14 Potential amphibian breeding site near KP 13, looking northeast



Photograph 15 Potential amphibian breeding site near KP 15

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Photograph 16 Potential amphibian breeding site near KP 22



Photograph 17 Potential amphibian breeding habitat in drag site near KP 13 (WHF4)

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Photograph 18 Potential amphibian breeding habitat near (WHF5)



Photograph 19 Wildlife tree with seasonally inactive nesting cavities near KP 1, looking northwest

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Photograph 20 Wildlife tree with evidence of woodpecker feeding

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Photograph 21 Potential American marten resting or denning site near KP 2

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Photograph 22 Remnants of an old American marten trap near KP 5, looking south

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Photograph 23 Trees with antler rubs and scratched by bear cub near KP 5.5

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Photograph 24 Antler rubs, likely from a white-tailed deer, near KP 8

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Photograph 25 Beaver lodge near KP 13.5



Photograph 26 Bear scratches on a tree near KP 16

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Photograph 27 Wildlife tree with potential nesting cavity near KP 16

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Photograph 28 Moose pelvis found near KP 16

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Photograph 29 Potential American marten or Red fox denning or resting site near KP 17

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Photograph 30 Small inactive stick nest, likely black-billed magpie near KP 20

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Photograph 31 Small inactive stick nest, likely American crow, near KP 21

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Photograph 32 Inactive songbird nest near KP 22

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Photograph 33 Small mineral lick near KP 26