

Williamson's Sapsucker Wildlife Habitat Areas 2008

by

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INTRODUCTION

Williamson's Sapsucker was assessed by COSEWIC (2005) as Endangered, primarily because of estimated low population numbers and the high projected loss of habitat to timber harvesting and land clearing. This project was intended to find new Williamson's Sapsucker nest locations so that they could be protected within Wildlife Habitat Areas (WHAs) under the Identified Wildlife Management Strategy (IWMS) under the authority of the Forest and Range Practices Act of B.C. Areas to be surveyed were within the Williamson's Sapsucker Area of Occupancy (AO) in Regions 3 (Southern Interior) and 8 (Okanagan-Boundary) of the B.C. Ministry of Environment, but excluding Tree Farm Licence (TFL) 15 (35) where the WHA budget of 1% of the land base had already been used. WHAs were proposed at all newly discovered nests that were not already covered by WHAs that were on crown land that were under forest licence or tree farm licence.

No attempt was made to summarize existing information on Williamson's Sapsucker in this report, which can be found summarized in the interim reports of this project cited above, or in Gyug (2005). This report is an interim summary report of the results from the 2005 surveys, and is not meant to summarize the state of knowledge of the species in Canada. A more complete analysis could be made from the raw data files.

METHODS

Sites were selected for inventory based on:

- Lack of previous inventory for Williamson's Sapsuckers from 1996-2007 but where they were suspected to be present based on habitat (presence of mature or old-growth Western Larch) or old records,
- Known presence of Williamson's Sapsuckers from previous years of inventory but where nests had not been previously located.

Using methods previously described in Gyug et al. (2007), 194 call playback (CPB) points were conducted from May 7 to June 1, 2008, generally using 300 to 400 m between successive call playback points in previously unsurveyed habitats to determine the presence of Williamson's Sapsuckers. Call playback points were generally done by walking since most areas accessible by road had already been surveyed. All cavity nesting birds and raptors heard or seen at call playback points were recorded. Date, time and location (UTM, NAD 83) were recorded. Wherever Williamson's Sapsuckers were recorded on the call playbacks, we returned for nest searches between June 9 and 28. An additional 175 CPB points were conducted for a separate study to delineate Critical Habitat at randomly selected points within the AO (Gyug 2008). New nests found during that study were included within the group of nests that were candidates for new WHAs. Williamson's Sapsucker detections made while travelling to or from these random sites were also returned to during June for nest searches as part of this WHA study. Chris Gill of Kestrel Consulting conducted 52 CPB points in the Merritt area, the results of which were incorporated into this study. Other Williamson's Sapsucker CPB surveys conducted in 2008 included 75 points outside the AO near Mt. Kathleen for the Environmental

Nests were found by returning to sites of previous detections (whether in 2008 or from previous years) in mid to late June and by following adults to the nest sites if they could be detected by silent listening or by response to CPB, or by listening for the begging calls of young woodpeckers in the nest. All young heard from a nest were investigated to determine the species of nesting woodpecker or sapsucker. The locations of all woodpecker or raptor nests found were recorded. Other data collected at each Williamson's Sapsucker nest included: tree species, DBH, tree height, nest height, nest hole aspect, Wildlife Tree Decay Class, and type of decay.

Data was entered into the Species Inventory (SPI) Excel template developed in 2007 specifically for Williamson's Sapsucker. WHA polygons were created around nests on forest licence crown land where there were no previous WHAs in shapefile format under the filename **WISA_newWHA_proposals_July2008**. WHA Step 1 forms were completed for all newly proposed WHAs. Data was also incorporated into the previously used shapefile formats for simpler analysis and display in the following shapefile sets: A shapefile of areas still to be searched (**WHA-need-searches_2009**) for Williamson's Sapsucker in the Okanagan-Boundary has been supplied as well.

- **WISA_callplaybacks_1996_2008a** Call playback station locations and results from all call playbacks (10807 records). This file is a temporary "a" version and will be updated to "final" status when the East Kootenay results are available and can be incorporated.
- **WISA_observations_1995_2008d** All Williamson's Sapsucker observations (2118) during the 1995-2008 surveys (including negative data from nest searches and re-coouancy checks). This is a temporary file, and will be updated from the "d" version to "final" status when the East Kootenay results are available for 2008 and can be incorporated.

RESULTS

In 2008, Williamson's Sapsuckers were detected at 17 of the 194 CPB stations conducted under this contract, and at 16 of the 29 sites returned to under this contract where detections were made in previous years (Figures 1 and 2). In total from all projects, 63 nests were found to be active in 2008 but not all old nests were checked, so this figure is not a comprehensive census or inventory (Figures 3 and 4). Of these, 28 were new nests in newly discovered nesting territories, and 9 were new nest trees in previously known nesting territories. A pair of Williamson's Sapsuckers (WK095, 096) and one other male (WK097, 098, 129) were found in the Anarchist Larch Goal 2 Protected Area on Anarchist Mountain in May. On return in June, the territory where the pair was found was still occupied by a male, although no nest was found, and no Williamson's Sapsucker were found on the other site.

There were 24 new WHAs proposed in 2008 (Table 1, Figure 5):

- 10 in the Merritt Timber Supply Area (TSA) of the Cascades Forest District (FD) within MOE Region 3,
- 5 in the Merritt TSA within MOE Region 8,
- 3 in the Okanagan-Shuswap FD within MOE Region 8, and
- 6 in the Boundary TSA of the Arrow-Boundary FD within MOE Region 8.

Three new nests were found on private land, and were not suitable for WHAs, and three were found in woodlots and were not suitable for WHAs. Two of the nests on private land (one from 2007, and one from 2008), and one on a woodlot (from 2007) were proposed for WHAs because they were very close to crown land, and the crown land was being used as part of the foraging territories.

RECOMMENDATIONS

As of March 2008, 26 Williamson's Sapsucker WHAs had been approved. There are a number of other WHAs in various stages of the proposal or approval process. This proposal would add another 24 WHAs to that total and about 1000 ha to protected sites for Williamson's Sapsucker.

Many of the nests were on private land where WHAs cannot be applied, or were on woodlots where application of WHAs of about 50 ha would take up very large portions of any given woodlot. These nest trees, nest sites, and foraging territories need to be managed under a different form of protection than WHAs.

A number of possible nesting areas for Williamson's Sapsucker in the Boundary remain to be searched for Williamson's Sapsucker, and a number of occupied territories where a nest could not be found should be searched again in 2009 to look for the nest. Estimated total search effort in 2009 of the remaining sites that have never been inventoried would be 38 person-days including both initial call playbacks and follow-up nest searches. Another 10 person-days should be added for follow-up on sites that have been used in the past, but where a nest could not be discovered, and some additional time (5 days) needs to be allotted for data entry, analysis, write up and preparation of WHA forms.

I would propose changing the criteria for WHA proposals to include activity areas and likely nesting trees of pairs that are obviously mated (i.e. responding to each others calls, seen on the same tree) in the nesting period (May and June). Otherwise the window of opportunity to efficiently find nests is so short (i.e., only 1-2 weeks) that many sites that should be WHA candidates may get passed over. In addition, nests that fail early cannot be found in June, and these require additional searches in following years, greatly adding to inventory time and effort.

LITERATURE CITED

- COSEWIC. 2005. COSEWIC Status Report on Williamson's Sapsucker *Sphyrapicus thyroideus*. Prepared for the Committee on the Status of Endangered Wildlife in Canada.
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- Gyug, L.W., I.P. Ohanjanian, C. Steeger, I.A. Manley, and P.W. Davidson. 2007. Distribution and Density of Williamson's Sapsucker (*Sphyrapicus thyroideus*) in British Columbia, Canada. British Columbia Birds 16: 2-15.

Table 1. Proposed Wildlife Habitat Areas for Williamson's Sapsucker, July 2008.

WHA Proposed Name	Nest and WISA notes	Area (ha)	WISA Territory Number	Forest Licensee	WHA Centroid
Region 3 Cascades Forest District					
Jesse Creek 2	WNM045 2008 + present 2006-2007	49.3	WTYM029	Aspen	10 656314 555945
Promontory Hills 1	WNM032 2008	20.2	WTYM056	Aspen	10 648957 556158
Lindley Creek 2	WNM030 2008 + pair present 2007	44.6	WTYM049	Tolko	10 653710 554909
Lindley Creek 3	WNM047 2008 + pair present 2006-2007	48.7	WTYM026	Tolko	10 650454 554605
Lindley Creek 4	WNM029, WNM046 2008 + pair present 2007	68.0	WTYM053/060	Tolko	10 650530 554485
Lindley Creek 5	WNM044 2008 + pair present 2007	49.4	WTYM027	Tolko	10 649694 554326
Midday Creek 1	WNM031 2008	50.0	WTYM061	Tolko	10 646548 554257
Midday Creek 2	WNM005 WNM020 2006-2007	70.7	WTYM014	Tolko/BCTS	10 643360 554233
Kane Valley 3	WNM043 2008	48.3	WTYM038	Tolko	10 661562 553528
Kane Valley 4	WNM028 2007-2008 (nest on powerline)	34.1	WTYM054	Tolko	10 653869 553366
Region 8 Cascades Forest District					
Davis Lake 2	WNM042 2008 + male present 2007	47.9	WTYM063	Tolko	10 664733 552439
Davis Lake 3	WNM041 2008 + pair present 2007	48.8	WTYM044	Tolko	10 664556 552358
Otter Valley Road 2	WNM036 2008	49.2	WTYM064	Tolko	10 664001 552081
Otter Valley Road 3	WNM037 2008	46.0	WTYM065	Tolko	10 666900 552203
Batstone Lake	WNM018 2007-2008	24.9	WTYM036	Tolko	10 671393 551775
Region 8 Okanagan-Shuswap Forest District					
Mt Randolph 6	WNK019 2008 + WNK004 2006-2008	76.7	WTYK010/006	Weyco	11 317999 549681
Anarchist Mt 2	WNK022 2008	47.8	WTYK018	Weyco	11 329211 543520
Anarchist Mt 3	WK090 2008-unsuccessful nest	14.0	WTYK020	Weyco	11 330146 543739
Region 8 Arrow-Boundary Forest District					
McKinney Creek 2	WNB037 2008	28.9	WTYB027	BCTS	11 341551 543595
Rock Creek 3	WNB038 2008 + occupied 2005-6	42.6	WTY069	BCTS	11 342733 544014
Johnstone Creek 13	WNB036 2008	48.9	WTYB029	Interfor	11 350177 543892
Johnstone Creek 14	WNB027 2007	28.3	WTYB020	Interfor	11 351626 544253
Ingram Creek 4	WNB035 2008	49.3	WTYB031	Interfor-TFL 8	11 364200 543799
Phoenix Mountain	WNB024 2007, WNB034 2008	44.6	WTYB019	Interfor/BCTS	11 384839 543866

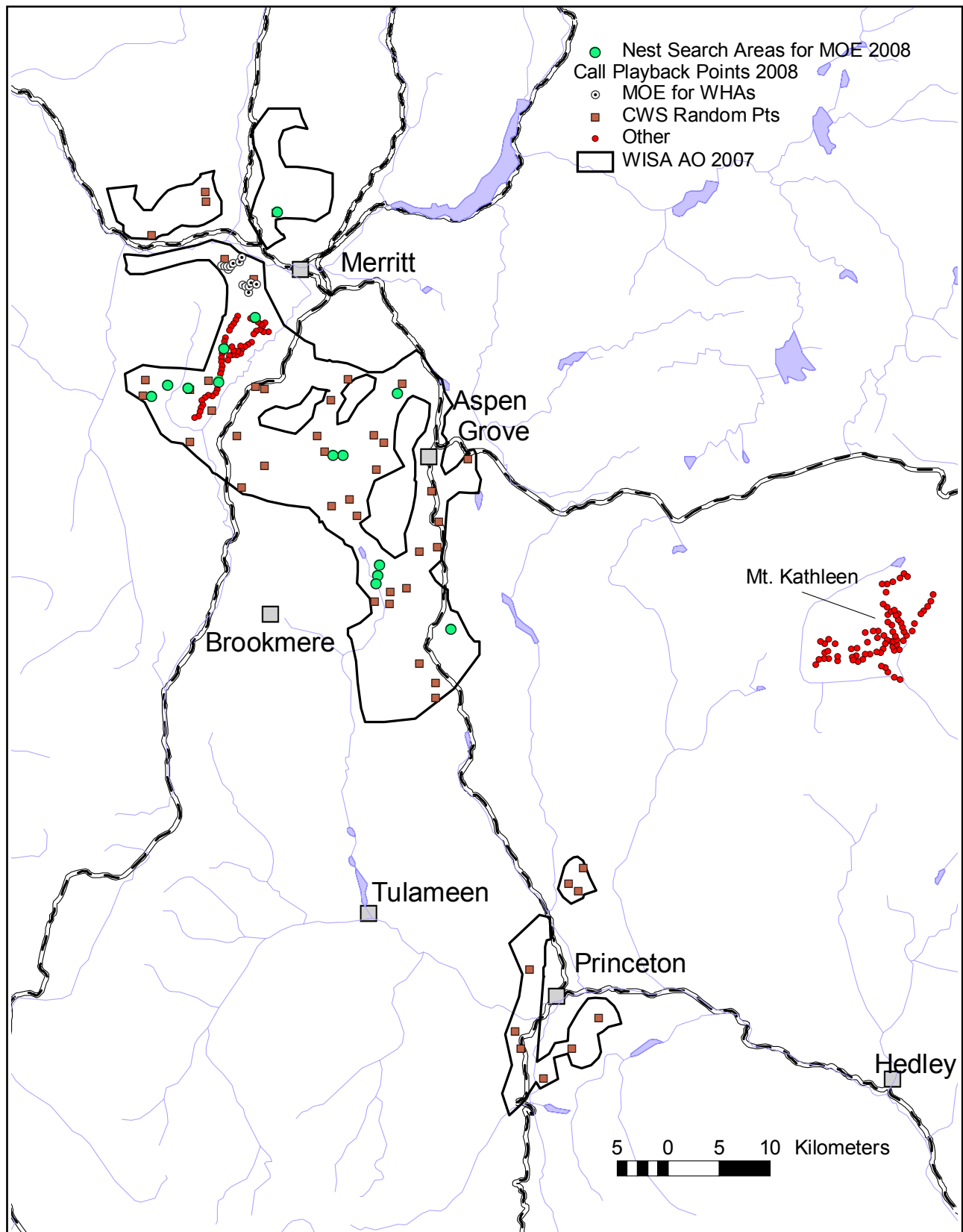


Figure 1. Location of call playback points and nest searches for Williamson's Sapsucker west of Okanagan Lake in 2008.

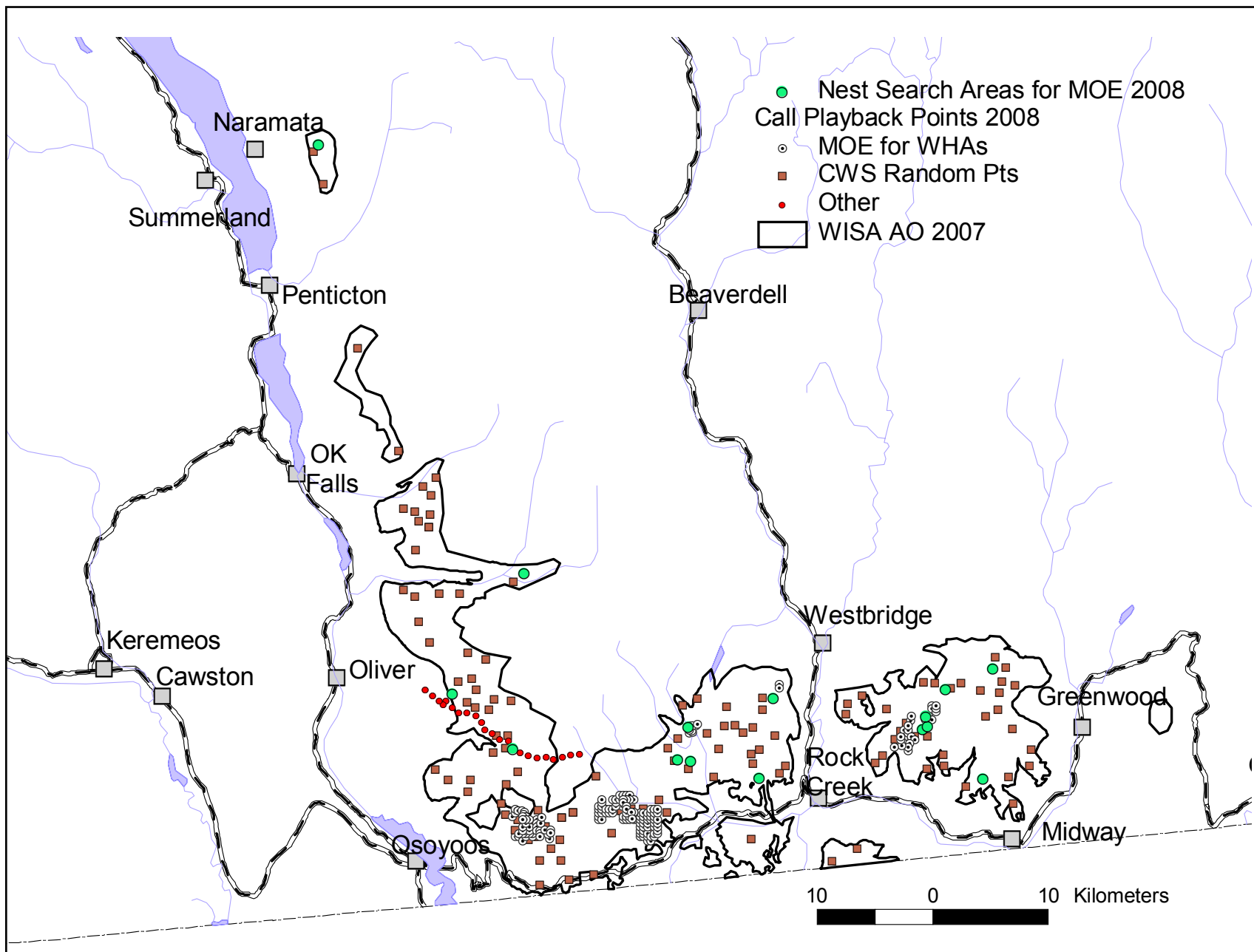


Figure 2. Location of call playback points and nest searches in the Okanagan-Boundary in 2008.

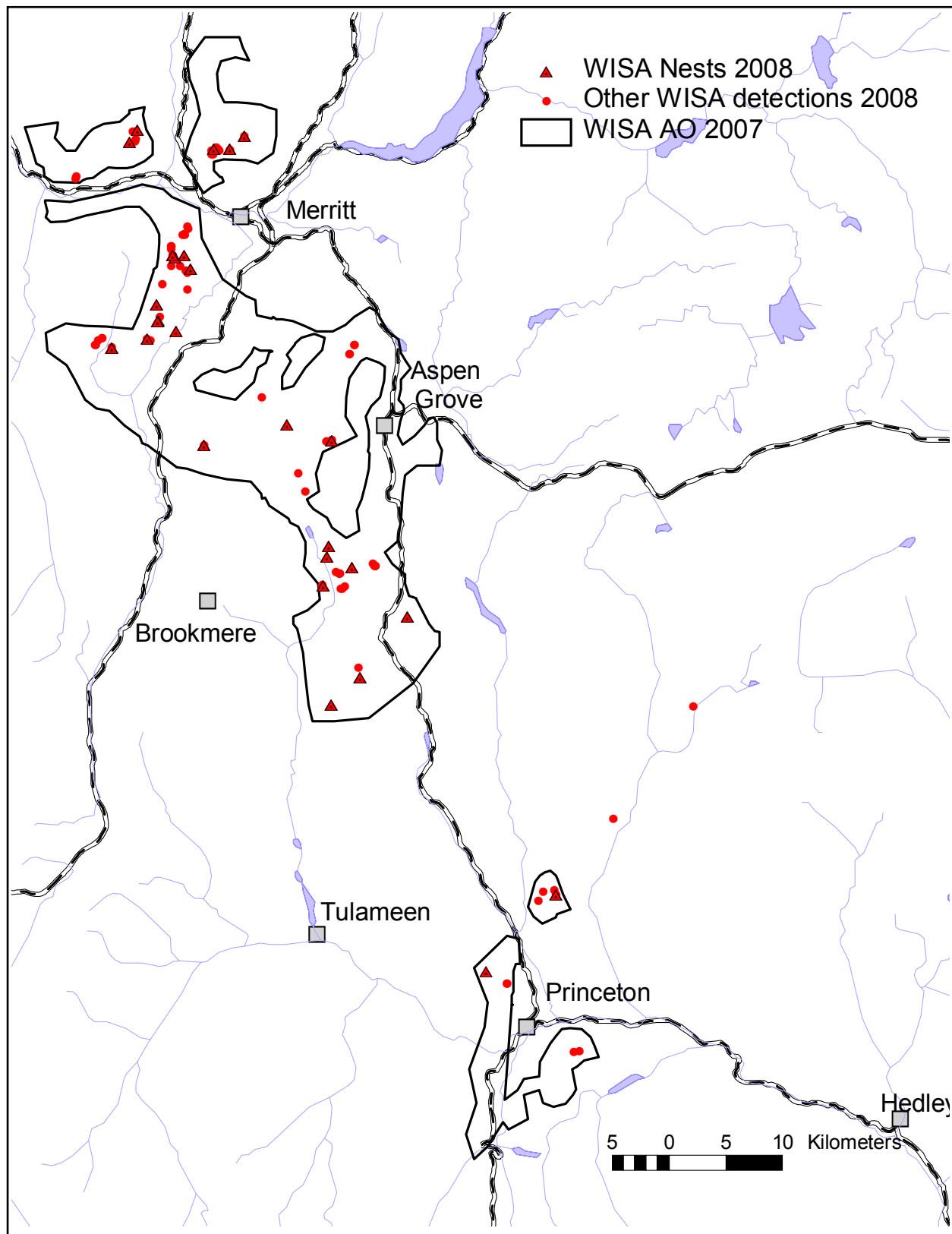


Figure 3. Location of nests and other Williamson's Sapsucker observations west of Okanagan Lake in 2008.

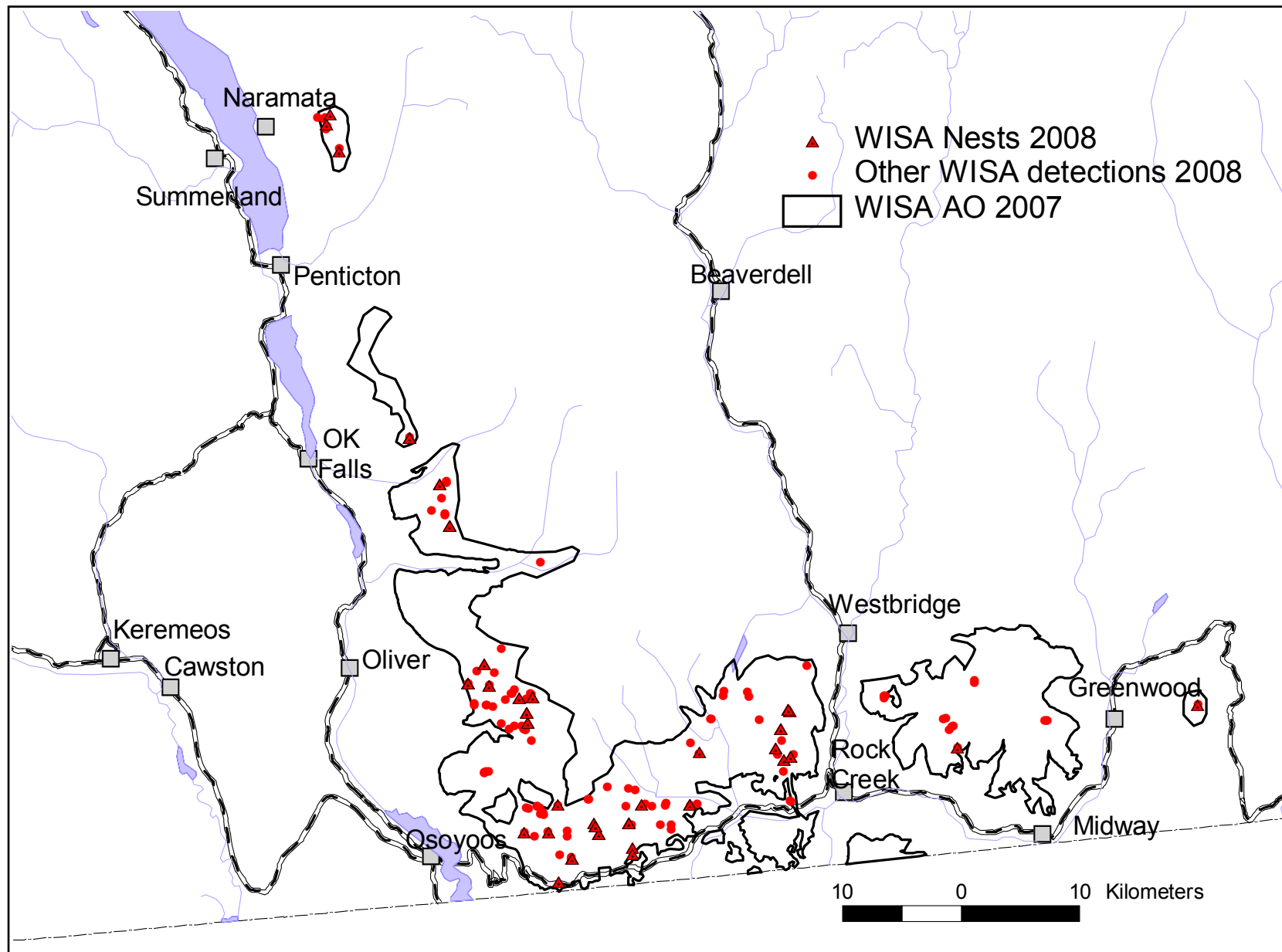


Figure 4. Location of nests and other Williamson's Sapsucker observations in the Okanagan-Boundary in 2008.

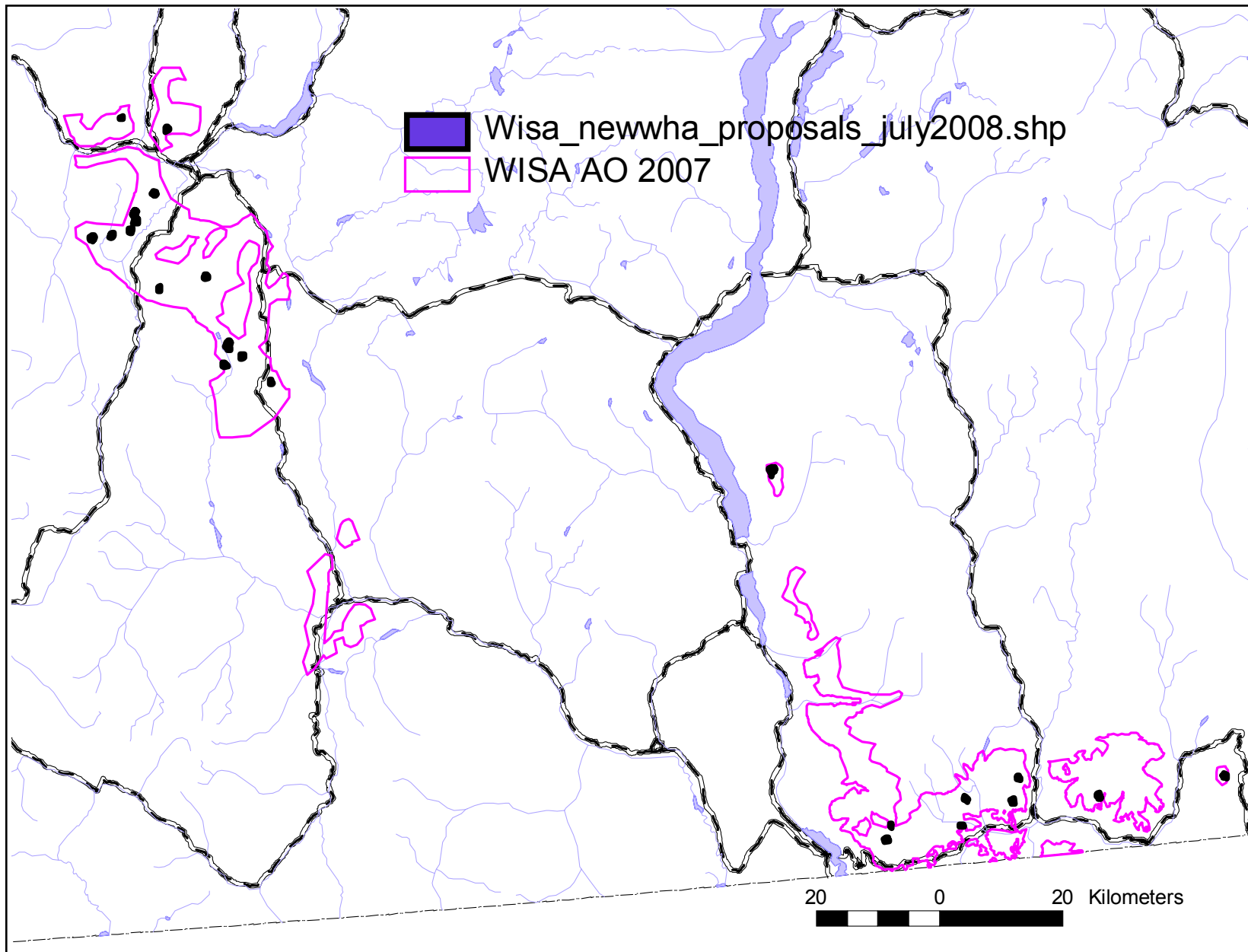


Figure 5. Proposed new Williamson's Sapsucker Wildlife Habitat Area locations, July 2008.

Appendix 1. Location and data for Williamson's Sapsucker nest trees known to be used in 2008 in the West and Okanagan-Boundary.

Nest Mark	Territory ID	Area	LOCATION	ZZ	UTM E	UTM N	Type of Nest Tree	Elev (m)	BEC	Tree Sp.	dbh	WTC	Albers E	Albers N
WK090	WTYK020	Okanagan	Anarchist Mt	11	330208	5437359	New Nest	1320	IDF dm 1	Lw		2	1487673	472938
WN011	WTY082	Boundary	Johnstone Creek	11	349620	5438771	Old Nest tree Re-used	1030	IDF dm 1	Lw	111	2	1506781	476761
WN047	WTY063	Boundary	Sidley Mt	11	335978	5435021	Old Nest tree Re-used	1220	IDF dm 1	Lw	94	3	1493696	471341
WN209	WTY059	Okanagan	Anarchist Mt	11	327165	5435349	Old Nest tree Re-used	1160	IDF xh 1	Lw	48	2	1484900	470567
WN210	WTY062	Okanagan	Sidley Mt	11	333368	5434547	Old Nest tree Re-used	1270	IDF dm 1	Lw	110	2	1491163	470547
WN213	WTY085	Boundary	Johnstone Creek	11	350459	5442903	Old Nest tree Re-used	1040	IDF dm 1	At	47	6	1507099	480962
WN226	WTY001	Okanagan	Mt Randolph	11	318827	5494367	Old Nest tree Re-used	1310	IDF dm 1	Lw	85	2	1469266	528035
WN229	WTY053	Okanagan	McCuddy-Gregoire	11	328606	5444535	Old Nest tree Re-used	1230	IDF dm 1	Lw	56	3	1485187	479851
WN309	WTY050	Okanagan	McCuddy-Gregoire	11	328603	5445391	Old Nest tree Re-used	1300	IDF dm 1	Lw	59	6	1485078	480699
WN314	WTY023	Okanagan	Vaseux Browning	11	324123	5461907	Old Nest tree Re-used	1420	IDF dm 1	At	35	2	1478570	496511
WNB017	WTYB017	Boundary	Sidley Mt-LehmanSp	11	335951	5432521	Old Nest tree Re-used	1130	IDF dm 1	Lw	103	2	1493981	468860
WNB021	WTYB028	Boundary	Johnstone Creek	11	350582	5442738	Old Nest tree Re-used	1040	IDF dm 1	At	38	5	1507242	480814
WNB025	WTY083	Boundary	Johnstone Creek	11	348986	5439831	Old Nest tree Re-used	1130	IDF dm 1	Lw	84	2	1506019	477733
WNB029	WTYB021	Boundary	Johnstone Creek	11	349625	5441380	Old Nest tree Re-used	1040	IDF dm 1	At	57	6	1506461	479348
WNB033	WTYB001	Boundary	Sidley Mt-LehmanSp	11	336014	5432993	New Nest in Known Nest Territory	1140	IDF dm 1	Lw	128	2	1493985	469336
WNB034	WTYB019	Boundary	Phoenix Mt	11	384681	5438999	New Nest in Known Nest Territory	1330	ICH mk 1	At	45	2	1541585	481378
WNB035	WTYB031	Boundary	Ingram-Bubar	11	364209	5438000	New Nest	1050	IDF dm 1	Lw	85	2	1521371	477822
WNB036	WTYB029	Boundary	Johnstone Creek	11	350205	5438953	New Nest	1130	IDF dm 1	Lw	107	2	1507340	477015
WNB037	WTYB027	Boundary	McKinney Cr	11	341299	5435965	New Nest	1140	IDF dm 1	Lw	44	2	1498865	472941
WNB038	WTY069	Boundary	McKinney	11	342631	5440266	New Nest	1170	IDF dm 1	Lw	91	2	1499651	477370
WNB039	WTYB025	Boundary	Sidley Mt	11	337252	5436522	New Nest	1260	IDF dm 1	Lw	82	2	1494775	472988
WNK004	WTY006	Okanagan	Mt Randolph	11	318501	5497526	Old Nest tree Re-used	1330	IDF dm 1	Lw	86	2	1468549	531127
WNK008	WTY019	Okanagan	Sidley Mt	11	333018	5435410	Old Nest tree Re-used	1270	IDF dm 1	Lw	41	2	1490707	471357
WNK010	WTY015	Okanagan	Vaseux 200 Rd	11	323747	5465383	Old Nest tree Re-used	1280	IDF dm 1	Lw	66	2	1477764	499911
WNK013	WTY036	Okanagan	McCuddy-Gregoire	11	325589	5449913	Old Nest tree Re-used	1250	IDF dm 1	At	69	2	1481520	484805
WNK014	WTY037	Okanagan	McCuddy-Gregoire	11	325789	5448072	Old Nest tree Re-used	1180	IDF xh 1	Lw	45	2	1481948	483005
WNK017	WTYK013	Okanagan	McCuddy-Gregoire	11	323999	5448443	New Nest	1030	IDF xh 1	Ew	36	2	1480124	483150
WNK018	WTYK009	Okanagan	Mt Randolph	11	318080	5496722	New Nest	1220	IDF dm 1	Lw	84	2	1468231	530278
WNK019	WTYK010	Okanagan	McLean Cr.	11	321752	5469667	New Nest	1350	IDF dm 1	Lw	56	2	1475249	503909
WNK020	WTYK016	Okanagan	Anarchist Mt	11	329505	5430893	New Nest	1130	IDF xh 1	Py	72	2	1487779	466443
WNK021	WTYK017	Okanagan	Anarchist Mt	11	330840	5432733	New Nest	1190	IDF xh 1	At	46	3	1488876	468433

Nest Mark	Territory ID	Area	LOCATION	ZZ	UTM E	UTM N	Type of Nest Tree	Elev (m)	BEC	Tree Sp.	dbh	WTC	Albers E	Albers N
WNK022	WTYK018	Okanagan	Anarchist Mt	11	329198	5435118	New Nest	1420	IDF dm 1	Lw	69	2	1486948	470591
WNK023	WTYK015	Okanagan	McCuddy-Gregoire	11	329295	5446643	New Nest	1390	IDF dm 1	Lw	98	2	1485609	482026
WNK024	WTYK005	Okanagan	Sidley Mt	11	333135	5435178	New Nest in Known Nest Territory	1270	IDF dm 1	At	28	2	1490852	471142
WNK025	WTY044	Okanagan	McCuddy-Gregoire	11	328128	5446719	New Nest in Known Nest Territory	1290	IDF dm 1	Lw	63	2	1484440	481956
WNL001	WTYL001	Logan Lake	Chartrand Rd	10	660058	5597134	Old Nest tree Re-used	1270	IDF dk 1	At	36	2	1372407	623727
WNM006	WTYM015	Merritt	Jesse Creek	10	658956	5560644	Old Nest tree Re-used	1150	IDF xh 2	At	35	2	1372910	587206
WNM007	WTYM017	Merritt	Jesse Creek	10	657649	5559478	Old Nest tree Re-used	1020	IDF xh 2	At	39	2	1371655	585984
WNM011	WTYM022	Merritt	Pike Mt	10	664385	5510381	Old Nest tree Re-used	1120	IDF dk 2	At	34	2	1380550	537231
WNM018	WTYM036	Merritt	Batstone Lake	10	671421	5517770	Old Nest tree Re-used	1100	IDF dk 1	At	44	2	1387255	544922
WNM021	WTYM050	Merritt	Lindley Creek	10	652192	5543804	Old Nest tree Re-used	700	PP xh 2	At	27	2	1366892	570081
WNM028	WTYM054	Merritt	Kane Valley	10	654228	5533637	Old Nest tree Re-used	1130	IDF dk 1	At	42	2	1369374	560012
WNM029	WTYM053	Merritt	Lindley Creek	10	650615	5544672	New Nest	950	IDF xh 1	At		3	1365279	570880
WNM030	WTYM049	Merritt	Lindley Creek	10	653692	5549124	New Nest	960	PP xh 2	Py	54	3	1368158	575463
WNM031	WTYM061	Merritt	Midday Creek	10	646505	5542536	New Nest	1010	IDF xh 1	At	23	2	1361266	568564
WNM032	WTYM056	Merritt	Promontory Hills	10	649583	5561545	New Nest	800	IDF xh 2	At	25	2	1363507	587695
WNM033	WTYM057	Merritt	Promontory Hills	10	648841	5560543	New Nest	810	IDF xh 2	At	23	6	1362810	586661
WNM034	WTYM047	Merritt	Lindley Creek	10	652208	5550444	New Nest in Known Nest Territory	990	IDF xh 2	At	26	2	1366617	576717
WNM035	WTYM016	Merritt	Kane Valley	10	665419	5533589	New Nest in Known Nest Territory	1150	IDF dk 1	At	29	2	1380558	560459
WNM036	WTYM064	Merritt	Otter Valley Rd	10	664092	5520874	New Nest	1000	IDF dk 1	At	34	2	1379794	547698
WNM037	WTYM065	Merritt	Otter Valley Rd	10	666718	5522363	New Nest	1080	IDF dk 1	At	32	3	1382352	549302
WNM038	WTYM021	Merritt	Pike Mt	10	667024	5512695	New Nest in Known Nest Territory	1150	IDF dk 2	At	30	2	1383085	539659
WNM039	WTYM060	Merritt	Lindley Creek	10	652444	5550258	New Nest	990	PP xh 2	At	23	2	1366861	576542
WNM040	WTYM048	Merritt	Lindley Creek	10	653201	5550382	New Nest in Known Nest Territory	1090	IDF xh 2	At	33	2	1367612	576699
WNM041	WTYM044	Merritt	Otter Valley Rd	10	664570	5523358	New Nest	1060	IDF dk 1	At	35	2	1380162	550200
WNM042	WTYM063	Merritt	Otter Valley Rd	10	664778	5524332	New Nest	1140	IDF dk 1	At	39	6	1380326	551183
WNM043	WTYM038	Merritt	Kane Valley	10	661556	5535208	New Nest	1170	IDF dk 1	At	35	2	1376628	561905
WNM044	WTYM027	Merritt	Lindley Creek	10	649620	5543177	New Nest	960	IDF xh 1	At	44	2	1364351	569342
WNM045	WTYM029	Merritt	Jesse Creek	10	656225	5559538	New Nest	900	IDF xh 2	Fd	91	2	1370230	585981
WNM046	WTYM060	Merritt	Lindley Creek	10	650684	5544773	New Nest	960	IDF xh 1	Py	102	2	1365344	570984
WNM047	WTYM026	Merritt	Lindley Creek	10	650596	5546150	New Nest	1060	IDF xh 2	At	42	2	1365195	572355
WNP006	WTYP018	Princeton	China Creek	10	676889	5486416	New Nest in Known Nest Territory	1070	IDF xh 1	At	29	2	1394109	513854
WNP007	WTYP025	Princeton	Jura Road	10	683334	5492898	New Nest	1040	IDF dk 1	At	22	2	1400264	520613