

Williamson's Sapsucker Inventory: Okanagan-Boundary 2003

by

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EXECUTIVE SUMMARY

Williamson's Sapsucker call playbacks were conducted in 3 areas in late May and early June 2003, and nest searches in 5 areas in late June 2003 east of Okanagan Lake. Sixteen new nest sites were found, 13 of which were in large western larch. A new provincial benchmark density of 2.7 nests/km² was found in the Vaseux Road 200 area of old growth western larch forest. Two nests were also found within seed tree cuts, and one within a small Wildlife Tree Patch of approximately 1-ha size in a seed tree cut. Adults were seen to forage 200-400 m from nest sites. Many areas remain to be surveyed for Williamson's Sapsuckers in the only range in the province where they can be considered common east of Okanagan Lake to Greenwood.

TABLE OF CONTENTS

INTRODUCTION.....	3
Acknowledgements	3
SUMMARY OF EXISTING INFORMATION.....	3
INVENTORY SITE CHOICE	4
INVENTORY METHODS	4
Data Management	5
INVENTORY RESULTS.....	6
DISCUSSION.....	8
LITERATURE CITED	9
Appendix 1 Summary of known Williamson's Sapsucker nesting records for the Okanagan Region 1995-2003.	17

Table of Figures

Figure 1. Overview map of Williamson's Sapsucker call playback stations sampled in 1997, 1998 and 2003, and areas searched for nests in 1996-1999 and in June 2003, Okanagan Region.	10
Figure 2. Overview map of known Williamson's Sapsucker nest sites from 1995-2003 in the Okanagan Region of the Ministry of Water, Land and Air Protection, B.C.	11
Figure 3. Location of call playback stations for Williamson's Sapsucker, May 28, 2003, and locations of Williamson's Sapsuckers seen or heard as well as other woodpecker and raptor nests found in the area, May 28 and June 21-24, 2003, Mount Randolph area northeast of Penticton, B.C.	12
Figure 4. Location of call playback stations for Williamson's Sapsucker, May 29, 2003, and locations of Williamson's Sapsuckers seen or heard as well as other woodpecker and raptor nests found in the area, May 29 and June 23 and 25, 2003, from Wolf Cub Road to Gregoire Creek, Tree Farm Licence 15, east of Oliver, B.C.	13
Figure 5. Location of call playback stations in Tree Farm Licence 8 for Williamson's Sapsucker, June 1, 2003, and outside Tree Farm Licence 8 from 1997 and 1998, and locations of Williamson's Sapsuckers seen or heard 1997-2003, Ingram and Wallace Creek areas, Tree Farm Licence 8, north of Midway, B.C.	14
Figure 6. Location of Williamson's Sapsucker active nests, other Williamson's Sapsucker observations not associated with any known nests, and other woodpecker and raptor nests found in the 221-ha old growth western larch census area, June 27-28, 2003, on Road 200, Tree Farm Licence 15, east of Okanagan Falls, B.C.	15

INTRODUCTION

This project was designed to collect inventory on Williamson's Sapsucker nest locations within selected areas in the Okanagan-Shuswap and Arrow-Boundary Forest Districts that lay within the Okanagan Region of the B.C. Ministry of Water, Land and Air Protection (WLAP). This data was to support the establishment of Wildlife Habitat Areas (WHAs) under the Identified Wildlife Management Strategy (IWMS) under the authority of the Forest Practices Code of B.C. Williamson's Sapsucker was not included in Volume 1 of the IWMS (B.C. Ministry of Forests and B.C. Environment 1999) but is planned for inclusion in Volume 2 which is planned for release later in 2003.

The specific objectives of this project were to conduct inventory for active Williamson's Sapsucker nests in areas that had not been previously censused during the inventories of 1996-1999 (Gyug 1996, 1997, 1998, 1999). The 1996 to 1999 inventories had only looked at areas that were included in the preliminary stages in 5-year Forest Development Plans, and only in 1996 looked at Tree Farm Licences. There were areas of known Williamson's Sapsucker use that had not been surveyed in 1996-1999 but would probably be good candidates for WHA status.

Acknowledgements

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SUMMARY OF EXISTING INFORMATION

Williamson's Sapsucker was the subject of a status report in British Columbia (Cooper 1995) as well as FDP area inventories from 1996 to 1999 (Gyug 1996, 1997, 1998, 1999). The *thyroideus* subspecies of Williamson's Sapsucker breeds in the Thompson-Okanagan Plateau, west to Manning Park and Lytton. They are common however only in a small area east of the Okanagan Valley as far as Boundary Creek, and within 40 km of the U.S. border. They appeared to require stands of mature or old Douglas-fir, ponderosa pine, and/or western larch between 780 and 1463 m elevation, although stands of larger diameter birch or cottonwoods were occasionally used for nesting. Western larch nest sites appear to be invaluable in the part of their range where they are relatively common. The estimate for population size in B.C. is on the order of only 100 nesting pairs (Gyug 1998). The only information on home range in B.C. (Manning and Cooper 1996) found a foraging range of 54 ha for one male that was feeding chicks in the nest.

INVENTORY SITE CHOICE

Sites were selected for inventory based on:

- Lack of previous inventory for Williamson's Sapsuckers,
- presence of mature or old growth western larch, and
- known presence of Williamson's Sapsuckers.

Only five areas were selected for inventory in the very limited amount of time available:

1. Mount Randolph—mature western larch stands and western larch seed trees in harvested areas with a Williamson's Sapsucker nest record of unknown exact location from 1993. Area is in Weyerhaeuser's Forest Licence, northeast of Penticton.
2. Vaseux Creek—mature western larch stands along the 200 Road from the intersection with the 201 Road (12.5 km) to beyond km 15, and along the Dutton and Browning Roads. Area is in Weyerhaeuser's Tree Farm Licence 15, east of Okanagan Falls. This area is known among the birding community as the best and most reliable area to see Williamson's Sapsuckers in B.C.
3. Wolf Cub Creek to Gregoire Creek—mature western larch stands north of McKinney Road. Area is in Weyerhaeuser's Tree Farm Licence 15, east of Okanagan Falls. One nest was found just south of this area in 1996, and one male observed just north of this area in 1996 inventories (Gyug 1996).
4. Ingram Creek—mature western larch stands that have been extensively partially cut since 1996. Williamson's Sapsuckers observed there in 1996 (LG, personal observation) and in East Ingram Creek (Sarell et al. 1998)
5. Wallace Creek—remnant mature western larch stands in 1960's to early 1970's harvested areas. Williamson's Sapsuckers nests recorded there in 1995 (Gyug and Bennett 1995) and 1996 (Manning and Cooper 1996).

Call playback surveys were conducted in the Mount Randolph, Wolf Cub and Ingram Creek areas in late May or early June 2003. In late June nest search surveys were undertaken in any areas where Williamson's Sapsuckers were detected on the call playback surveys, as well as in selected areas in the Vaseux and Wallace Creek areas. Two areas with known previous nests (Sidley Mt Road, Pope and Talbot, CP 269-4, and one tree in Woodlot 411-1 at Johnstone Creek) were briefly checked for renesting of Williamson's Sapsuckers in late June.

INVENTORY METHODS

Call playbacks were conducted in the Mount Randolph area on May 28, in the Wolf Cub area on May 29, and at Ingram Creek on June 1, 2003. The drums and call of Williamson's Sapsuckers were played as per the recommendations of the RIC Manual for woodpecker surveys (1996). Call playback stations were 400-m apart. Calls were played three times in different directions with a 20-second listening period between successive playbacks. All cavity nesting birds and raptors heard or seen were recorded. Time and location (UTM, NAD 83) were recorded on consumer-grade GPS units to an accuracy of at least 10 m.

Wherever Williamson's Sapsuckers were recorded on the call playbacks, we returned for nest searches in late June (June 21-28, 2003). Part of the old growth area of western larch at Vaseux was also delimited as a census area and we attempted to locate every active Williamson's Sapsucker nest and territory in the area. Some nearby areas were also surveyed, but not as part of the census area. Short searches at areas of a few previously known locations at Sidley Mt, Johnstone Creek, and Wallace Creekby were also made.

Nest searches were made by doing call playbacks at irregular time and distance intervals. Adults were found to be relatively responsive to these call playbacks in the morning, but much less so in the afternoon (based on responses of pairs we knew to be present). Morning surveys attempted to come within 200 m of any point in the survey area, while afternoon surveys had to be more intense, approaching any point in the survey area to within 50-100 m. Nests were found by following adults to the nest sites, 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 any other woodpecker or raptor nests found were recorded. The locations (UTM, NAD 83, 10-m accuracy) of Williamson's Sapsucker nests were determined using a handheld consumer-grade GPS unit. Other data collected at each Williamson's Sapsucker nest included: tree species, DBH, tree height, nest height, nest hole aspect, Wildlife Tree Decay Class, type of decay, elevation, slope, aspect, topographic situation, soil moisture regime, general characteristics of nesting stand, and enough understorey information to later determine Site Series once the BEC variant had been determined from the 1:250,000 provincial BEC GIS maps. Sometimes other notes on the Williamson's Sapsucker activity were noted, such as whether the young in the nest could be heard or seen, and which stands the adults were flying to and from in their foraging bouts. In two cases, only fledged juveniles could be found so that the nest tree could not be exactly determined.

Data Management

Data files are in Excel and in ARC shapefile format. If you have one of the earlier versions of these files, you should update it with one of these from July 2003. Errors in location and other information have been found in any of the original files. Separate files have been kept for:

- Call playback station locations and results from May and early June call playbacks including 1997, 1998, and 2003. **WISA_playbacks.dbf**
- Nest search areas where nests were not necessarily found (as a record of areas searched unsuccessfully) from 1996 to 1999 and 2003. **WISA_search_areas.dbf**
- All Williamson's Sapsucker observations during the 1996-2003 surveys, and including nest data from other sources where location can be fairly accurately ascertained. This shapefile set includes all nesting and other data. The Excel (.xls) version of this file contains some additional sheets and information on nest tree forest cover polygons and nest tree history. **WISA_1996_2003.dbf**
- Other woodpecker nests found during the surveys from 1996-1999 and 2003. **Other_woodpecker_nests.dbf**

INVENTORY RESULTS

In 2003, call playbacks for Williamson's Sapsucker were done at 161 stations which brings the total number of call playback stations including 1997 and 1998 to 415 (Figure 1). At Mount Randolph, 20 call playback stations yielded 7 Williamson's Sapsucker observations (Figure 3). At Wolf Cub to Gregoire Creeks, 63 call playback stations yielded 7 Williamson's Sapsucker observations and two other possible responses, that were only heard faintly and not confirmed (Figure 4). At Ingram Creek, 78 call playback stations yielded 3 Williamson's Sapsucker responses (Figure 5). The East Ingram area was only partially covered.

Seventeen active Williamson's Sapsucker nests were found in 2003. One of these (Browning Road) was in a tree previously known from an active nest in 1998, but which had not been used for nesting in 1999 and 2000. Therefore 16 nests had been newly discovered during these inventories in 2003. This brings the total number of nests found in the Okanagan Region of WLAP from 1995 to 2003 to 72 (Figure 2). However, 19 of these are nests from additional years in previously known trees, and 12 were from second-hand sources so the exact tree is not known. There are therefore 41 separate nesting trees for which we now have precise nesting tree data.

Of the 16 new nests found in 2003, 13 were in western larches ranging in DBH from 54 to 125 cm with a mean of 84 cm. The remainder were in: a dead spruce stub (43-cm DBH, 5-m tall), a dead Douglas-fir (49-cm DBH, 15-m tall), and a living veteran ponderosa pine (86-cm DBH, 32-m tall).

The Vaseux Road 200 old-growth western larch census area was 221 ha (Figure 6). 43 ha were in seedtree cuts or old clearcuts with residuals within the census area. The 200 Road went through the area with the road right-of-way covering about 2-ha. The majority of the census area was covered in one day, with a small portion covered on the next day. Six active Williamson's Sapsucker nests were found in the census area on June 27, 2003, and one active territory for which no nest could be found on June 28, 2003. In addition, Williamson's Sapsuckers were heard to the west of the north end of the area on June 28, and a barely-fledged juvenile and an adult male to the southwest on June 28. With 6 known nests active at one time, the known density of Williamson's Sapsucker nest in the total area of 221 ha was one nest per 37 ha, or 2.8 nests/km². There could have been a seventh nest at the southwest corner within the area, but the juveniles might have already fledged.

All of the Williamson's Sapsucker nests in the Vaseux Road 200 census area were in western larch trees. One was at the edge of a clearcut, two were within 50-m of the edge of a seed tree cut, and the rest were further into the forested area. In addition, the area contained an active Northern Goshawk nest 270 m from the nearest forest edge, and only about 50 m from an active Williamson's Sapsucker nest. There was an active Red-tailed Hawk nest at the edge of one of the clearcuts. There was a Barred Owl family (2 adults and 3 young) active for the entire 3 hour period that I was in the south west corner of the census area. Other woodpecker nests found in the census area included two Red-naped Sapsucker nests, a Downy Woodpecker nest, a Black-backed Woodpecker nest, a Hairy Woodpecker nest and a Three-toed Woodpecker nest. Pileated Woodpeckers were also active within the census area. The census was not considered to be complete for raptors or other woodpeckers, and there may have been more nesting in the area.

Of the 16 new nests found in 2003, 9 were in mature forest, 4 were at the edge of seedtree cuts or old clearcuts and the forest, 2 were in seed tree cuts and one was in a Wildlife Tree Patch (WTP) within a seedtree cut. Some extra time was spent observing where the adults were foraging on each foraging bout for nests at the edges of cuts, or nests in seedtree cuts.

For the nests at the edges of the cutblocks, at the first Mount Randolph nest the pair were observed foraging in both the seed tree cut, the riparian forest to the west, and the continuous forest on the far side of the seed tree cut to the east. At the second Mount Randolph nest, the female foraged only into the continuous forest to the west. The male foraged both into the seedtree cut and into the forest. At the third nest (McCuddy Creek), the male appeared to fly regularly 400 m to continuous forest across a deep gully and across a powerline clearing. At the fourth nest at the edge of a cutblock (Vaseux), the male was observed foraging to the west into continuous forest, and the female observed foraging to the south into continuous forest and also east into the cutblock.

For the nests inside seedtree cuts, the male and female at the McCuddy site regularly flew into continuous forest to the east and south of the nest tree on foraging bouts. The nest tree was only 55 m from the forest to the east, but was considerably further to the south. There was one sap tree that the female in particular seemed to visit regularly in the forest to the east, and there were at least two other western larch nesting trees that, while not used in 2003, appeared to have been used for nesting many times in the past. At Wolf Cub Creek, the nest tree was 65 m from the forest to the east, 115 m from the forest to the north, 190 m from the forest to the west and 150 m from the forest to the south. The pair were observed making foraging bouts into the forest in each of these directions. However, the male was originally encountered on May 28, and again on June 23 in the forest to the east of the nest that was only 65 m from the nest.

For the nest in the WTP, a Williamson's Sapsucker nest had been found in 1997 at Sidley Mt. Road. The same tree contained active nests in 1998 and 1999 as well, but not in 2000. Between June 2000 and October 2002, the site had been logged as Cutting Permit 269 Block 4 of Pope and Talbot. A WTP of much less than 1 ha had been left around the nesting tree used in 1997-1999. Another WTP of about 1-ha in size had been left around another potential Williamson's Sapsucker western larch (with previous sapsucker nesting holes in it) nesting tree about 110 m to the south. There was an active nest in 2003 in the nesting tree to the south within the WTP.

The patch contained 5-6 trees with active sapsucker wells (Douglas-fir and western larch of 20-40 cm DBH). The adults were observed on several foraging bouts while feeding the nestlings. Some of the foraging bouts took place entirely within the WTP where the nest was located. On other bouts, the adults were observed flying into the seedtree cut around the WTP as far as 260 m from the nest by the male. The adults did not fly to one tree and then fly back. Visits were made to 9 trees in the seedtree cut on one foraging bout by the female at a maximum distance of about 200 m from the nest.

DISCUSSION

The Mount Randolph area is about 70 km north of the U.S. border. Previously I had estimated the range in which Williamson's Sapsuckers were common to be only the area within 40 km of the U.S. border (Gyug 1999), but this clearly extends that area northwards.

The density of nesting Williamson's Sapsuckers at Johnstone Creek in Woodlot 411-1 was previously suggested as the highest density then known to occur in Canada at 0.78 Williamson's Sapsucker nests/km² (Gyug 1999). I had also previously suggested that it be used as the provincial benchmark density in habitat modeling (Gyug 2000). However, I had also stated that this might be eclipsed once surveys were undertaken in areas of Tree Farm Licence 8 at Ingram Creek or TFL 15 (Gyug 1999). Densities at Ingram Creek appeared to be fairly low based on the 2003 surveys. Densities in the old growth western larch stand at Road 200 in Tree Farm Licence 15 at 2.8 Williamson's Sapsucker nests/km² should now be the benchmark provincial density for habitat modeling.

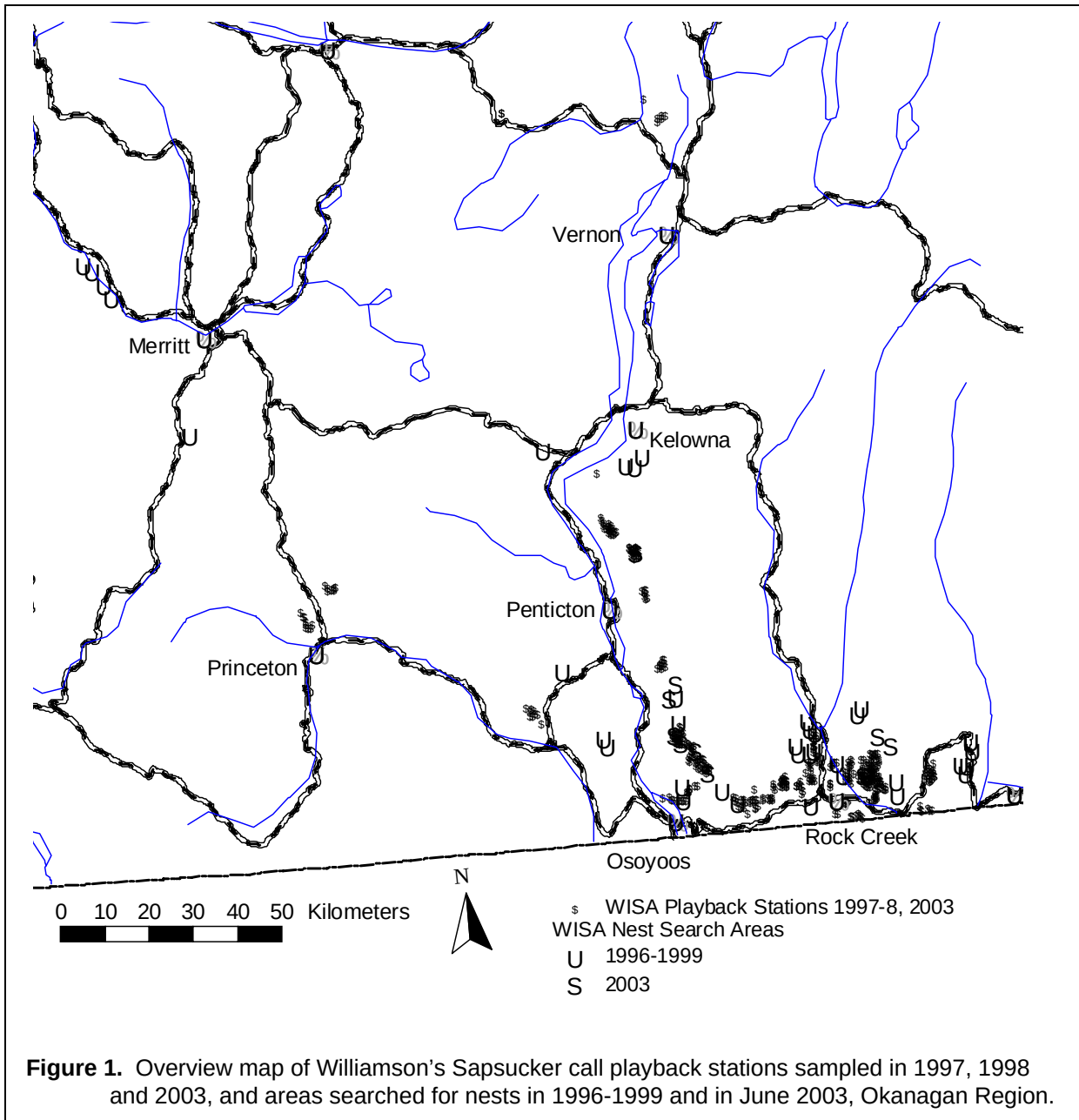
Of the 52 active Williamson's Sapsucker nests that have been found east of Okanagan Lake during the 1996-2003 surveys, the nest inside the WTP at Sidley Mountain is the smallest forested patch (approximately 1-ha) that they have yet been found nesting in. This may represent the extreme in how small a forested area (adding on the second WTP), and including foraging on seedtrees around the patch, that Williamson's Sapsucker can successfully nest within. This nest should be monitored annually for the next several years to see if this nest continues to be active, and if continues to be successful, i.e. if young continue to be raised to fledging (or almost to fledging).

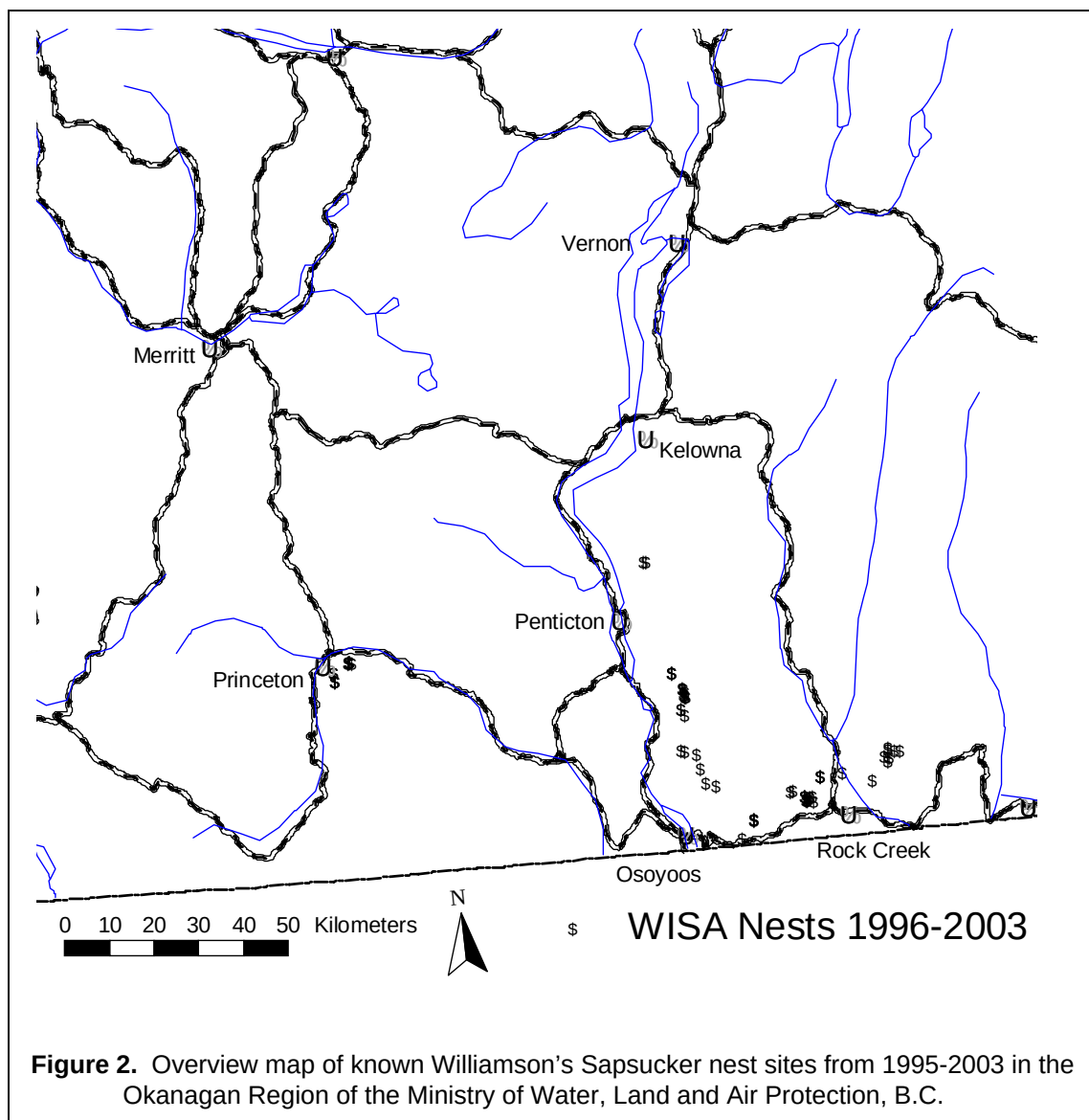
In two cases, recently fledged young males were seen with adult males, one on June 25 and one on June 28. To survey all nests in an area, surveys should begin earlier than June 21, and two separate visits should be made since the nesting activities are not in complete synchrony. While surveys from June 20-30 will find most nests with the young still in them, the young in some nests will already have fledged by then.

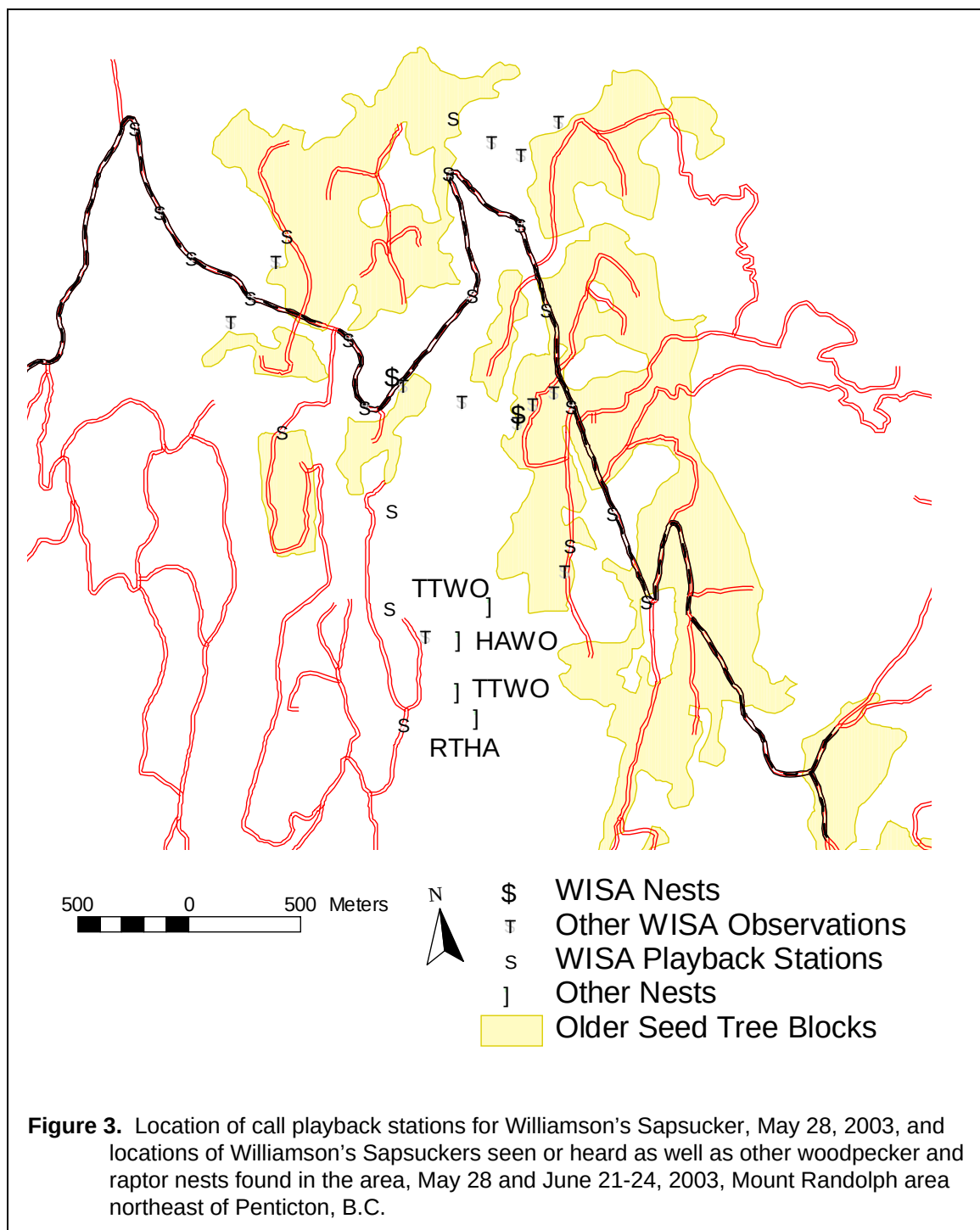
Wildlife Habitat Area Step 1 forms were completed and have been submitted separately for older nest sites in 2002. For the newly surveyed, or resurveyed areas, nest sites were considered as WHA candidate areas, and WHA Step 1 forms filled in for those areas to be proposed as WHAs.

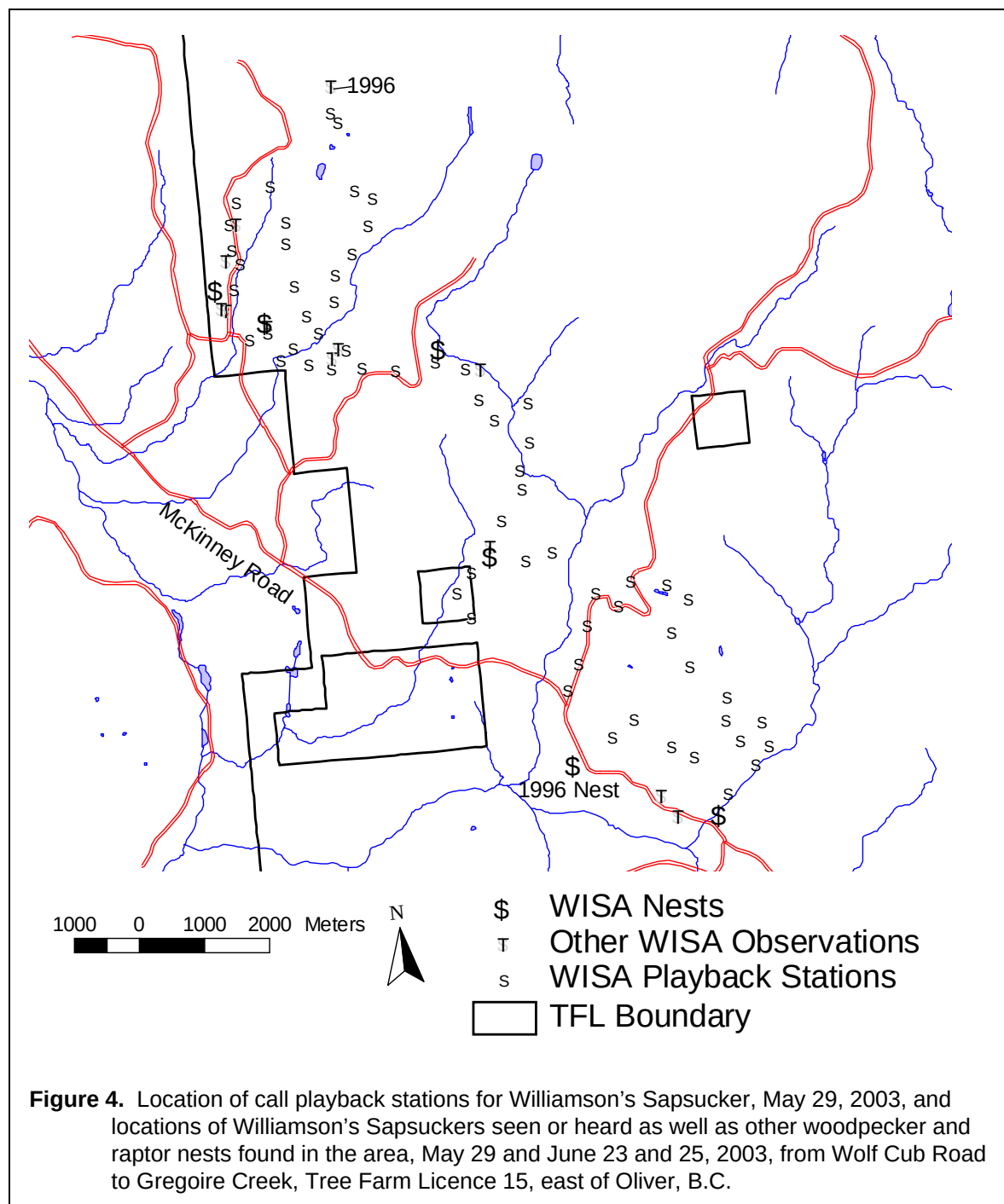
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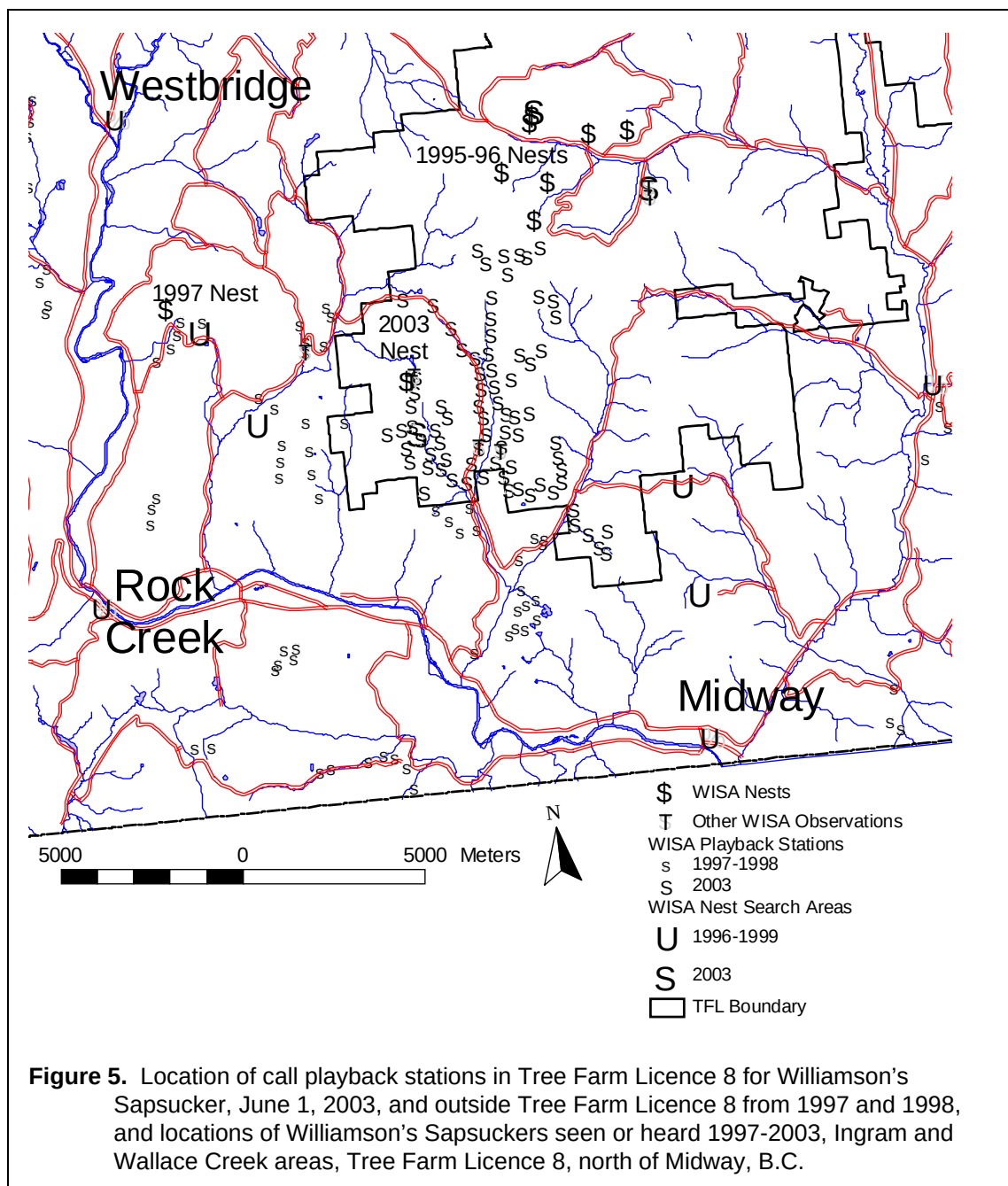
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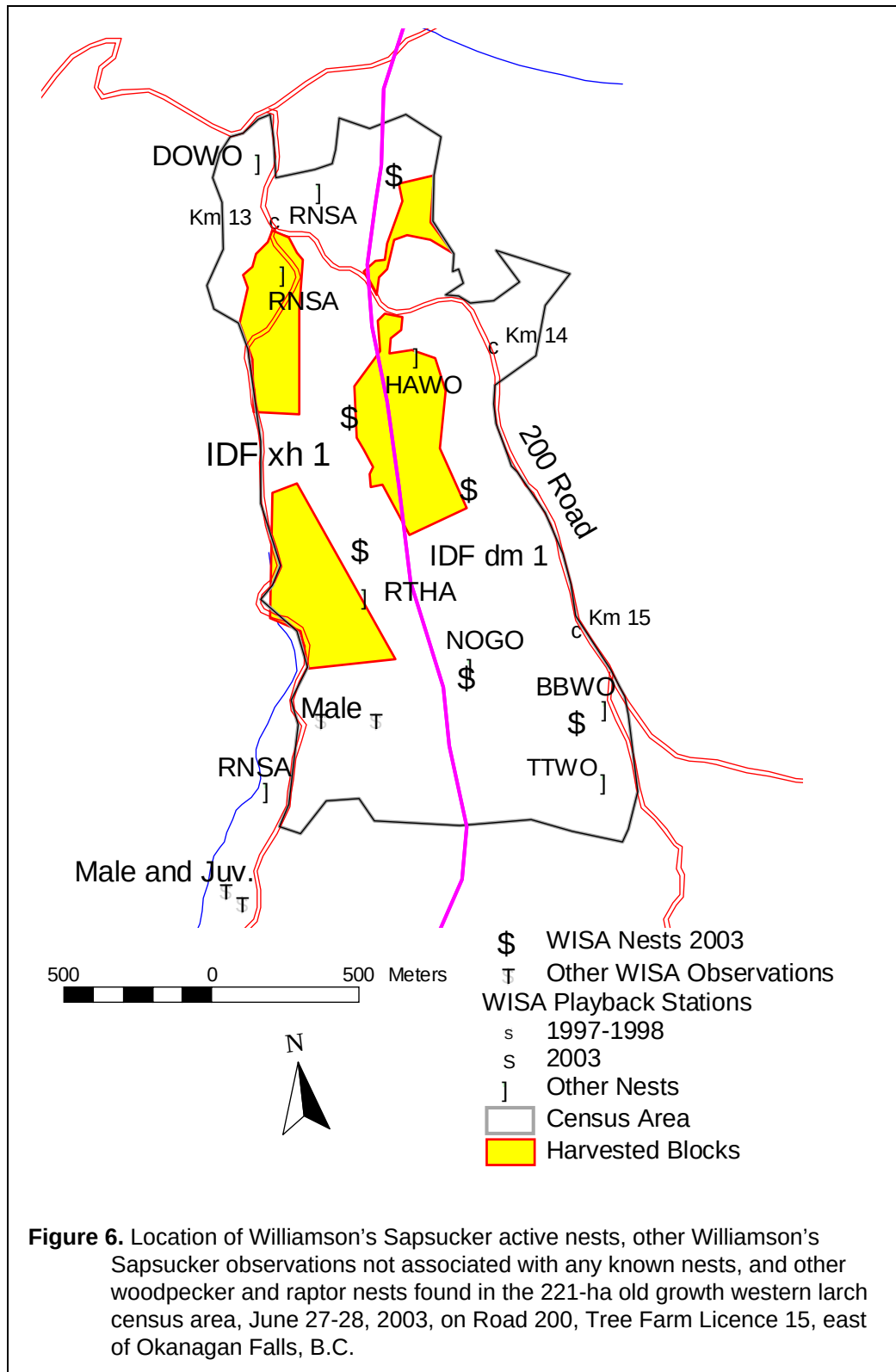












Appendix 1. Summary of known Williamson's Sapsucker nesting records for the Okanagan Region 1995-2003.

GIS ID	Tree Num	Forest District	Tenure	AREA	YYYY	MM	DD	SURVEYORS	ZZ	UTM_E	UTM_N	Type Observation	BEC	Tree Sp.	DBH	WT Class
31	1	Penticton	Weyco	McLean Cr.	1997	6	27	Les Gyug	11	321686	5470108	New Nest	IDFdm1	Lw	70	2
35	1	Penticton	Weyco	McLean Cr.	1998	6	9	Les Gyug	11	321686	5470108	Same nest tree as previous year	IDFdm1	Lw	70	2
47	1	Penticton	Weyco	McLean Cr.	1999	6	18	Les Gyug	11	321686	5470108	Same nest tree as previous year	IDFdm1	Lw	70	2
59	1	Penticton	Weyco	McLean Cr.	2000	6	2	Les Gyug	11	321686	5470108	Same nest tree as previous year	IDFdm1	Lw	70	2
40	2	Boundary	TFL 15	Browning	1998	6	22	Ross Munro	11	322901	5461758	Nest	IDFxm1	Lw	118	2
125	2	Penticton	TFL 15	Browning	2003	6	28	Les Gyug	11	322901	5461759	Old WISA nest tree reoccupied	IDFxm1	Lw	121	2
9	3	Penticton	TFL 15	Browning	1996	6	22	Ross Munro	11	323498	5460392	New Nest	IDFdm1	Lw	92	2
12	4	Penticton	TFL 15	Baldy Cr.	1996	6	25	Ray Wershler	11	326332	5444761	New Nest & tree	IDFxm1	Ep	32	5
27	5	Boundary	P&T	Sidley Mt	1997	6	24	Corry Moes	11	335966	5435129	Nest	IDFdm1	Lw	80	2
36	5	Boundary	P&T	Sidley Mt	1998	6	9	Les Gyug	11	335966	5435129	Nest	IDFdm1	Lw	80	2
48	5	Boundary	P&T	Sidley Mt	1999	6	18	Les Gyug	11	335966	5435129	Nest	IDFdm1	Lw	80	2
24	6	Boundary	SB	Rock Cr.	1997	6	23	Les Gyug	11	344836	5440302	New Nest	IDFdm1	Lw	86	2
34	7	Boundary	SBFEP	Rock Cr.	1998	5	29	Ross Munro	11	345468	5440482	New Nest	IDFdm1	Lw	70	5
25	8	Boundary	WL	Johnstone Cr.	1997	6	23	Les Gyug	11	347812	5439092	New Nest	IDFdm1	Lw	105	2
37	8	Boundary	WL	Johnstone Cr.	1998	6	9	Les Gyug	11	347812	5439092	Same nest tree as previous year	IDFdm1	Lw	105	2
52	8	Boundary	WL	Johnstone Cr.	1999	6	25	Les Gyug	11	347812	5439092	Same nest tree as previous year	IDFdm1	Lw	105	2
60	8	Boundary	WL	Johnstone Cr.	2000	6	25	Les Gyug	11	347812	5439092	Same nest tree as previous year	IDFdm1	Lw	105	2
28	9	Boundary	WL	Johnstone Cr.	1997	6	24	Ross Munro	11	348375	5438439	New Nest	IDFxm1	Ep	26	4
26	10	Boundary	WL	Johnstone Cr.	1997	6	23	Ross Munro	11	348288	5438137	New Nest	IDFxm1	Lw	76	2
50	10	Boundary	WL	Johnstone Cr.	1999	6	21	Les Gyug	11	348288	5438137	Old WISA nest tree reoccupied	IDFxm1	Lw	76	2
61	10	Boundary	WL	Johnstone Cr.	2000	6	25	Les Gyug	11	348288	5438137	Same nest tree as previous year	IDFxm1	Lw	76	2
38	11	Boundary	WL	Johnstone Cr.	1998	6	9	Les Gyug	11	348392	5438465	New Nest	IDFxm1	Ep	33	5
41	12	Boundary	WL	Johnstone Cr.	1998	6	23	Ross Munro	11	349003	5438436	New Nest	IDFxm1	Lw	73	2
13	13	Boundary	P&T	Johnstone Cr.	1996	6	26	Wayne Smith	11	349620	5438771	New Nest	IDFxm1	Lw	110	2
42	14	Boundary	WL	Johnstone Cr.	1998	6	23	Ross Munro	11	349833	5437663	New Nest	IDFxm1	Lw	118	2
29	15	Boundary	P&T	Hulme Creek	1997	6	25	Ross Munro	11	351893	5442933	New Nest	IDFdm1	Act	96	2
39	15	Boundary	P&T	Hulme Creek	1998	6	15	Les Gyug	11	351893	5442933	Same nest tree as previous year	IDFdm1	Act	96	2
30	16	Boundary	WL	Nicholson Cr.	1997	6	26	Ross Munro	11	357025	5443272	New Nest	IDFdm1	Py	70	4
49	17	Boundary	P&T	Hulme Creek	1999	6	18	Les Gyug	11	351904	5442962	New Nest	IDFdm1	Sx	63	2
51	18	Boundary	WL	Johnstone Cr.	1999	6	25	Les Gyug	11	348156	5438046	New Nest	IDFxm1	Sx	45	4

GIS ID	Tree Num	Forest District	Tenure	AREA	YYYY	MM	DD	SURVEYORS	ZZ	UTM_E	UTM_N	Type Observation	BEC	Tree Sp.	DBH	WT Class
98	19	Penticton	WL	Johnstone Cr.	2003	6	25	Les Gyug/JSH	11	349033	5438579	New Nest	IDFdm1	Lw	77	2
103	20	Boundary	P&T	Sidley Mt	2003	6	26	Jeff Hoyt/LG	11	335978	5435021	New Nest	IDFdm1	Lw	94	2
44	101	Princeton	Private	Copper Mt Rd	1998	6		Jerry Herzig	10	681721	5476875	New Nest	IDFdk1	At	32	2
54	102	Princeton	Private	Copper Mt Rd	1999	6		Jerry Herzig	10	681721	5476875	New Nest, same patch	IDFdk1	Py	39	5
32	103	Princeton	Weyco	Copper Mt Rd	1997	6		Jerry Herzig	10	681987	5474668	New Nest	IDFdk1	At	27	2
43	103	Princeton	Weyco	Copper Mt Rd	1998	6		Jerry Herzig	10	681987	5474668	Same nest tree as previous year	IDFdk1	At	27	2
53	104	Princeton	FL	Copper Mt Rd	1999	6		Jerry Herzig	10	681987	5474668	New Nest, same patch	IDFdk1	At	23	2
62	104	Princeton	Weyco	Copper Mt Rd	2000	6		Jerry Herzig	10	681987	5474668	Same nest tree as previous year	IDFdk1	At	23	2
64	104	Princeton	Weyco	Copper Mt Rd	2001	6		Les Gyug	10	681987	5474668	Same nest tree as previous year	IDFdk1	At	23	2
5	105	Princeton	Weyco	August Lk	1995	6	0	Jerry Herzig	10	685310	5478907	New Nest	IDFdx1	Py	71	2
18	105	Princeton	Weyco	August Lk	1996	6		Jerry Herzig	10	685310	5478907	Same nest tree as previous year	IDFdx1	Py	71	2
33	105	Princeton	Weyco	August Lk	1997	6		Jerry Herzig	10	685310	5478907	Same nest tree as previous year	IDFdx1	Py	71	2
45	105	Princeton	Weyco	August Lk	1998	6		Jerry Herzig	10	685310	5478907	Same nest tree as previous year	IDFdx1	Py	71	2
55	105	Princeton	Weyco	August Lk	1999	6		Jerry Herzig	10	685310	5478907	Same nest tree as previous year	IDFdx1	Py	71	2
58	106	Princeton	Weyco	August Lk	2000	6	0	Les Gyug	10	685248	5478835	New Nest, same patch	IDFdx1	Py	84	2
46	107	Princeton	Weyco	August Lk	1999	6	0	Jerry Herzig	10	686143	5478704	New Nest	IDFdk1	Fd	120	2
84	108	Penticton	Weyco	Mt Randolph	2003	6	21	Les Gyug	11	318546	5495644	New Nest	IDFdm1	Sx	43	5
86	109	Penticton	TFL 15	Wolf Cub Cr	2003	6	23	LG JSH	11	321786	5452715	New Nest	IDFdx1	Fd	49	5
87	110	Penticton	TFL 15	Wolf Cub Cr	2003	6	23	LG JSH	11	322471	5452135	New Nest	IDFdx1	Py	86	2
90	111	Penticton	Weyco	Mt Randolph	2003	6	24	Les Gyug	11	319087	5495405	New Nest	IDFdm1	Lw	67	2
93	112	Penticton	TFL 15	McCuddy	2003	6	25	Jeff Hoyt/LG	11	325464	5448116	New Nest	IDFdx1	Lw	54	2
94	113	Penticton	TFL 15	McCuddy	2003	6	25	Jeff Hoyt/LG	11	325077	5451390	New Nest	IDFdm1	Lw	112	2
95	114	Penticton	TFL 15	Gregoire	2003	6	25	Jeff Hoyt/LG	11	328459	5443720	New Nest	IDFdm1	Lw	79	2
100	115	Boundary	TFL 8	West Ingram	2003	6	26	Les Gyug	11	363330	5440477	New Nest	MSdm1	Lw	96	2
112	116	Penticton	TFL 15	Vaseux Cr. 200 Rd	2003	6	27	Les Gyug	11	324111	5465024	New Nest	IDFdm1	Lw	79	2
113	117	Penticton	TFL 15	Vaseux Cr. 200 Rd	2003	6	27	Les Gyug	11	324376	5464196	New Nest	IDFdm1	Lw	62	2
116	118	Penticton	TFL 15	Vaseux Cr. 200 Rd	2003	6	27	Les Gyug	11	324024	5464391	New Nest	IDFdm1	Lw	125	2
117	119	Penticton	TFL 15	Vaseux Cr. 200 Rd	2003	6	27	Les Gyug/JSH	11	323722	5464868	New Nest	IDFdx1	Lw	71	2
118	120	Penticton	TFL 15	Vaseux Cr. 200 Rd	2003	6	27	Jeff Hoyt	11	323739	5465322	New Nest	IDFdx1	Lw	99	2
119	121	Penticton	TFL 15	Vaseux Cr. 200 Rd	2003	6	27	Jeff Hoyt	11	323992	5466112	New Nest	IDFdm1	Lw	81	2
1		Penticton	TFL 15	200 Rd	0	0	0	Dick Cannings	11	323562	5466322	New Nest	IDFdx1		0	0
2		Penticton	TFL 15	200 Rd	0	0	0	Dick Cannings	11	324298	5465481	New Nest	IDFdm1		0	0
3		Penticton	TFL 15	200 Rd	0	0	0	Dick Cannings	11	323688	5466025	New Nest	IDFdx1		0	0
4		Princeton	Weyco	August Lk	0	0	0	Jerry Herzig	10	685086	5478619	New Nest	IDFdx1	Py	0	0

GIS ID	Tree Num	Forest District	Tenure	AREA	YYYY	MMDD	SURVEYORS	ZZ	UTM_E	UTM_N	Type Observation	BEC	Tree Sp.	DBH	WT Class
6		Boundary	TFL 8	Wallace Creek	1995	6	Stephen Bennett	11	366655	5445860	New Nest	ICHmk1	Lw		2
7		Boundary	TFL 8	Wallace Creek	1995	6	Stephen Bennett	11	367842	5445423	New Nest	ICHmk1	Lw		4
8		Boundary	TFL 8	Wallace Creek	1995	6	Stephen Bennett	11	369137	5446590	New Nest	ICHmk1	Lw		2
14		Boundary	TFL 8	Wallace Creek	1996	6	Todd Manning	11	367673	5447278	New Nest	MSdm1	Lw	77	2
15		Boundary	TFL 8	Wallace Creek	1996	6	Todd Manning	11	370220	5446583	New Nest	ICHmk1	Lw	54	6
16		Boundary	TFL 8	Wallace Creek	1996	6	Todd Manning	11	367581	5447117	New Nest	ICHmk1	Lw	72	2
17		Boundary	TFL 8	Wallace Creek	1996	6	Todd Manning	11	367351	5444435	New Nest	MSdm1	Lw	75	2
63		Penticton	Private	Anarchist Mt	2001	6 0	C Charlesworth	11	332708	5431296	New Nest	IDFxh1		0	0