



Province of
British Columbia

Ministry of
Environment,
Lands and Parks

BC
Environment
WILDLIFE BRANCH

3872133
Third Floor
780 Blanshard Street
Victoria
British Columbia
V8V 1X4

MEMORANDUM

March 24, 1998

From: Lisa Hartman

To: Trudy Chatwin
Rare and Endangered Species Biologist
Ministry of Environment, Lands and Parks,
Wildlife Branch
2080-A Labieux Rd
Nanaimo, BC
V9T 6J9

Re: Location of red-listed Vancouver Island Water Shrew (*Sorex palustris brooksi*)
occurrences recorded during summer of 1997

Enclosed is a summary of location data for 14 water shrews captured on Vancouver Island in 1997, as part of the FRBC-funded Vancouver Island Water Shrew Inventory (FRBC #PA96186-IN).

This was the second year of an inventory that was originally scheduled as a 3-year project. FRBC funding was significantly reduced during this season, and has been canceled for the final year of the study. Consequently, results of this project are inconclusive with respect to the originally stated goals, which were to describe the distribution and broad habitat associations of the species.

Fourteen *S. p. brooksi* were caught in 1997, on 16 surveyed traplines. One animal was released alive and the remaining 13 were prepared as museum skins and skeletons, with tissues extracted for genetic analysis as outlined in the project proposal. Skins and skeletons are housed at the Royal BC Museum, and tissues samples are being stored and analyzed at Texas Tech University in collaboration with Dr. R.J. Baker.

These 14 captures, which include the first documented capture on the west coast of Vancouver Island, add to our very limited information for this species. From 1934-1959 *S. p. brooksi* was recorded from only 5 localities on Vancouver Island. In the nearly 40 years since then, only 2 additional specimens were recorded prior to this study. Recent captures have now been documented in the vicinity of four of the original locality records (near Coombs, Black Creek, Victoria, and Port Alberni), and in two new areas (Salmon River and Kennedy Lake).

Detailed descriptions of all sites sampled are included in the project report (Hartman in prep.). *S. p. brooksi* was captured in both old and mid-aged forest stands, however data are inadequate to conclude anything about the vulnerability of this species to logging activities. Occurrence in mid-aged forests should not be interpreted as an indication that the species is not at risk due to forest practices. This question requires further study.

Increased road development and settlement along the eastern side of Vancouver Island is a potential concern for this species, as most occurrence records come from this part of the island. The 1996 captures in the Hamilton Marsh are adjacent to the new Qualicum Connector, and the proposed path of the new island highway directly crosses the 1997 Black Creek capture site, and falls within 1 km of capture sites on the Tsolum River and Woodhus Creek.

Plans to raise the water level of the Sooke reservoir represent an additional concern with respect to habitat for this species. Two *S. p. brooksi* were captured on Rithet Creek, and captures were also made elsewhere in the Greater Victoria Water District (Veitch and Niagara Creeks). Plans to raise the level of the Sooke reservoir should be preceded by a thorough assessment of potential habitat loss for this species.

Further information on the results of this project can be obtained on request, pending completion of the final report.

Sincerely,



Lisa Hartman
Riparian Research Biologist
Ministry of Environment, Lands and Parks
Wildlife Branch - Research and Biodiversity Section
c/o Fisheries Research Section
UBC Campus
2204 Main Mall
Vancouver, BC, V6T 1Z4

ph: (604) 822-4551
fax: (604) 660-1849
email: lhartman@fwhdept.env.gov.bc.ca

cc. Dave Nagorsen - Royal British Columbia Museum
Syd Cannings - Ministry of Environment, Conservation Data Centre
Gordon Joyce - Greater Victoria Water District
Craig Barlow - Ministry of Transportation and Highways

Area	Dates	Trapline	Start UTM	End UTM	SOPA-br	Trapsite	UTM	Trapsit	UTM	Scale	Zone	Map source
GWWD	May 21-30	Veitch Ck	455425 / 5364675	455565 / 5364440	1	Gee 3-1	455450 / 5364640			1:10,000	10	GWWD map GS-FC-SS-96.1
		Rithet Ck	446675 / 5381630	446710 / 5381350	2	Pitfall 13	446685 / 5381450	Gee 4-3	446680 / 5381580	1:10,000	10	GWWD map SR-FC-SN-96.1
		Niagara Ck	457865 / 5371140	457840 / 5371395	1	Pitfall 17	457850 / 5371360			1:10,000	10	GWWD map GS-FC-SN-96.1
Coombs	Jun 5-13	Morrison Ck	401325 / 5458175	401600 / 5458350	1	Pitfall 12	401475 / 5458275			1:50,000	10	NTS 92F/8
		Morningstar Ck	399075 / 5462925	399275 / 5463050	0					1:50,000	10	NTS 92F/8
		Black Brook	381500 / 5472900	381300 / 5472650	1	Pitfall 12	381400 / 5472725			1:50,000	10	NTS 92F/7
Black Ck	Jun 18-27	Woodhus Ck	335355 / 5528310	335100 / 5528400	2	Pitfall 7	335280 / 5528350	Gee 20-3	335090 / 5528410	1:20,000	10	TWest Base Inv Area 12 #E21N17
		Black Ck	338000 / 5526750	337820 / 5526640	2	Pitfall 11	337910 / 5526650	Gee 19-3	337825 / 5526640	1:20,000	10	TWest Base Inv Area 12 #E20N17
		Tsolum R	340680 / 5520640	340870 / 5520450	1	Pitfall 10	340760 / 5520540			1:20,000	10	TWest Base Inv Area 12 #E21N17
Salmon River	Jul 2-11	Cooper Ck	728385 / 5559255	728185 / 5559080	0					1:5,000	9	M&B 92K.011.2.4
			299600 / 5558150	299475 / 5558000						1:50,000	10	NTS 92K/4
		Kay Ck	730965 / 5560095	731225 / 5560175	1	Pitfall 17	731180 / 5560170			1:5,000	9	M&B 92K.012.3.1
			302375 / 5558800	302650 / 5558825			302550 / 5558825			1:50,000	10	NTS 92K/4
		Martin Ck (inc.)	292875 / 5548650	292750 / 5548400	0					1:50,000	10	NTS 92K/4
Jordan River	Jul 16-25	Rough Ck	426575 / 5370950	426275 / 5370900	0					1:50,000	10	NTS 92B/5
			426430 / 5371140	426150 / 5371120						1:20,000	10	WFP 92B.041
		Bear Ck	430950 / 5372550	431250 / 5372500	0					1:50,000	10	NTS 92B/12
			430850 / 5372740	431140 / 5372700						1:20,000	10	WFP 92B.051
Kennedy Lk	Aug 13-22	Sandhill Ck	306700 / 5433500	307000 / 5433600	0					1:50,000	10	NTS 92F/4
		Upper Lost Shoe Ck	312225 / 5431200	312450 / 5431025	0					1:50,000	10	NTS 92F/4
		Lower Lost Shoe	310725 / 5431700	310525 / 5431675	2	Pitfall 11	310650 / 5431750	Pitfall 20	310525 / 5431675	1:50,000	10	NTS 92F/4