Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Lobaria pulmonaria	ID	Kootenai	Off FS208, approx. 5 mi N of Pritchard	47.709	115.973	POPTRI	Creek	760	Hutchinson	ID822	7/24/99	
Lobaria pulmonaria	ID	Shoshone	FS9 SE of Prichard, 1.5 miles E of Bear	47.595	115.771	ABGR	Creek	1015	Hutchinson	ID823	7/25/99	
Lobaria pulmonaria	ID	Shoshone	FS350 accross Hwy 50 from Huckleberry CG	47.262	116.087	POPTRI/TSHE/RHAPUR	Creek	751	Hutchinson	ID831	7/22/99	
Lobaria pulmonaria	ID	Kootenai	FS208 N of Big Hank CG	47.876	116.109	POPTRI	Creek	852	Hutchinson	ID832	7/25/99	
Lobaria pulmonaria	ID	Kootenai	FS412 N of Berlin Flats	47.818	115.958	RHPU/ POPTRI/PIEN/ TSHE	Creek	884	Hutchinson	ID833	7/25/99	
Lobaria pulmonaria	ID	Bonner	Johnson Creek CG, W of Clark Fork	48.14	116.23	POPTRI	River	629	Hutchinson	ID913	8/3/99	
Lobaria pulmonaria	ID	Bonner	Near Priest River Experimental Sta.	48.332	116.85	PIEN/Alnus	Wetland	683	Hutchinson	ID921	7/31/99	
Lobaria pulmonaria	ID	Bonner	NW of Clark Fork	48.15	116.188	POPTRI	Creek	633	Hutchinson	ID922	8/2/99	
Lobaria pulmonaria	ID	Bonner	E of Bridge on Hwy 2	48.74	116.503	BETPAP/POPTRI	River	639	Hutchinson	ID923	8/3/99	
Lobaria pulmonaria	ID	Bonner	Priest Lake	48.74	116.855	POPTRI	Lake Margin	746	Hutchinson	ID931	7/31/99	
Lobaria pulmonaria	ID	Boundary	FS435 E of the Moiye River	48.874	116.097	POPTRI	Seep	1066	Hutchinson	ID-932-02	8/2/99	SRP
Lobaria pulmonaria	ID	Bonner	South End off Hwy 2	48.502	116.461	POPTRI	Lake Margin	636	Hutchinson	ID933	8/2/99	

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Lobaria pulmonaria	ID		St. Joe River			POPTRI			Jones		1/1/98	
Lobaria pulmonaria	ID		N. fk of the Coeur d'Alene			POPTRI			Jones		1/1/98	
Lobaria pulmonaria	ID	Idaho	Walton Ck	46.5	114.683	conifer	ravine	1100	McCune	10687		MCC
Lobaria pulmonaria	ID	Idaho	Two Shadows Ck, 7km W of Lowell	46.133	115.667	ALRU	Creek	502	McCune	10182	3/14/79	MCC
Lobaria pulmonaria	ID	Idaho	Wild Goose CG, Clearwtr R	45.133	115.617		Floodplain	700	McCune	17938		MCC
Lobaria pulmonaria	ID	Clearwate	Aquarius RNA	46.85	115.667	conifer	Floodplain	510	McCune	18563	8/1/90	MCC
Lobaria pulmonaria	ID	Clearwate	Hiden Ck at N Fk Clearwtr	46.833	115.167		Floodplain	1020	McCune	18498	8/1/90	MCC
Lobaria pulmonaria	ID	Idaho	3 Devils Picnic area, Clearwtr R	45.133	115.65		Floodplain	700	McCune	17956	6/1/89	MCC
Lobaria pulmonaria	ID	Idaho	Two Shadows Ck, 7km W of Lowell	46.133	115.667	ALRU	Valley bottom	502	McCune	10166		MCC
Lobaria pulmonaria	ID	Idaho	9 km E of Lowell	46.217	115.55	moss/rock		518	McCune	10164		MCC
Lobaria pulmonaria	ID	Shoshone	18 km N of Wallace, W edge of Murray-Pritchard Ck	47.633	115.867	POPTRI	Creek	855	McCune	16557	8/1/87	MCC
Lobaria pulmonaria	ID	Shoshone	13km N of Kellogg, Mouth of Coal Ck at Lower CDA R	47.633	116.117	POPTRI	Floodplain	690	McCune	16542	8/1/87	MCC
Lobaria pulmonaria	ID	Shoshone	14 km N of Wallace, Mouth of Trail Ck at Beaver Ck	47.6	115.933	POPTRI	Floodplain	1065	McCune	16515	8/1/87	MCC
Lobaria pulmonaria	ID	Idaho		46.55	114.683			1090	McCune	16983		MCC

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Lobaria pulmonaria	ID	Idaho		46.467	114.95			910	McCune	12075		MCC
Lobaria pulmonaria	ID	Idaho	Jct of Glade Ck & Lochsa R	46.217	115.533		Floodplain	580	McCune	11876		MCC
Lobaria pulmonaria	ID	Idaho	Jct of Glade Ck & Lochsa R	46.217	115.533	deciduous shrubs	Floodplain	580	McCune	11864	9/2/82	MCC
Lobaria pulmonaria	ID	Kootenai		47.717	116.383			700	McCune	21092		MCC
Lobaria pulmonaria	ID	Idaho	Lochsa R.	46	115.52	THPL	Old growth THPL forest	610	Rosentreter	9122	2/22/95	RR
Lobaria pulmonaria	ID	Idaho	Near the confluence of the Selway R.			bark	White Cap Ck	1700	Rosentreter	RR-ID-36	7/12/76	RR
Lobaria pulmonaria	ID	Bonner	Hwy 2, 10 miles W of Lolo Pass				Thuja forest		Rosentreter	RR-ID-3	8/1/77	RR
Lobaria pulmonaria	ID	Benewah	Chatcolet Lake						Schroeder	L748	4/18/70	ID
Lobaria pulmonaria	ID	Bonner	Kaniksu NF						Schroeder	L941	8/4/70	ID
Lobaria pulmonaria	ID	Boundary					Mixed conifer forest		Schroeder	L1670	6/19/71	ID
Lobaria pulmonaria	ID	Clearwtr	St. Joe NF						Schroeder	L1520	3/27/71	ID
Lobaria pulmonaria	ID	Idaho	Peasley Ck Rd				ABGR-PIEN-TABR		Schroeder	3050	8/21/74	ID
Lobaria pulmonaria	ID	Idaho	Selway R, Glover Ck						Schroeder	3099	8/22/74	ID
Lobaria pulmonaria	ID	Idaho	Clearwtr National Forest						Schroeder	L1719	7/6/71	ID
Lobaria pulmonaria	ID	Idaho						915	Schroeder	3151	6/28/75	ID

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	Coll#No	Date	Herb.
Lobaria pulmonaria	ID	Idaho	Lochsa R.						Schroeder	L1557	5/15/71	ID
Lobaria pulmonaria	ID	Idaho	Lochsa R.						Schroeder	L1555	5/15/71	ID
Lobaria pulmonaria	ID	Idaho	Lochsa R.						Schroeder	L1561	5/15/71	ID
Lobaria pulmonaria	ID	Idaho	Nez Perce National Forest						Schroeder	L1732	7/8/71	ID
Lobaria pulmonaria	ID	Kootenai					Conifer forest		Schroeder	L1662	6/9/71	ID
Lobaria pulmonaria	ID	Latah	At Moscow				Moist, shaded forest	958	Schroeder	L351	11/8/69	ID
Lobaria pulmonaria	ID	Latah					Conifer forest		Schroeder	L301	9/13/69	ID
Lobaria pulmonaria	ID	Latah					Conifer forest		Schroeder	L1966	4/15/72	ID
Lobaria pulmonaria	ID	Latah	Moscow Mountain						Schroeder	L351	11/8/69	ID
Lobaria pulmonaria	ID	Shoshone	St. Joe River						Schroeder	L860	6/12/70	ID
Lobaria pulmonaria	ID	Bonner	Kaniksu NF						Schroeder, W. Melquist	L2066	5/22/72	ID
Lobaria pulmonaria	ID	Clearwtr	West of Elk R					839	Schwandt	339	5/30/74	ID
Lobaria pulmonaria	ID	Clearwtr	West of Elk R					839	Schwandt	338	5/30/74	ID
Lobaria pulmonaria	ID	Clearwtr	Benton Ck						Steele	01	7/15/70	ID
Lobaria pulmonaria	ID	Idaho	near 3 Devils Picnic Area, 3 mi W of Lowell	46.14	115.65		PIEN-THPL forest	438	Trana	5970	8/21/78	OSC
Lobaria pulmonaria	WA	Pend Oreille	Boswell Ranch	48.35	117.05	POPTRI	Wet Meadow	739	Hutchinson	FP391	8/11/99	

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Physcia semipinnata	CA	Nevada	Lake of the Pines	0.0167	0.0167	Quercus douglasii	Sierra Nevada Foothills	460	Winkler	17894c		MCC
Physcia semipinnata	MT	Lake	Swan Lake CG	48.058	114.033	POPTRI	Lake Margin	935	McCune	9566	7/23/78	MCC
Physcia semipinnata	WA	San Juan	Dead Man Bay						Anderegg	10409	6/10/77	
Physconia americana	ID	Shoshone	Rd 301/east of Bridge at jct w/1905	47.005	116.165	POPTRI	Creek	937	Hutchinson	ID533	7/15/99	
Physconia americana	ID	Shoshone	Just S of Hwy 50	47.247	116.02	POPTRI	Creek	698	Hutchinson	ID523	7/14/99	
Physconia americana	ID	Boundary	Kootenai Wildlife Refuge	48.74	116.413	POPTRI	River	532	Hutchinson	ID912	8/1/99	
Physconia americana	ID	Benewah	N of 6/3 jct, 1 km S of Mashburn Sta.	47.183	116.497	POPTRI	River	786	Hutchinson	ID-413-13	7/21/99	SRP, OSC
Physconia americana	ID	Clearwtr	Cold Ck CG	46.721	115.301	POPTRI	Wetland	810	Hutchinson	ID612	7/9/99	
Physconia americana	ID	Bonner	Johnson Creek CG, W of Clark Fork	48.14	116.23	POPTRI	River	629	Hutchinson	ID913	8/3/99	
Physconia americana	ID	Latah	Hwy 99 N of Kendrick	46.642	116.72	POPTRI	Creek	757	Hutchinson	ID431	7/19/99	
Physconia americana	ID	Bonner	NW of Clark Fork	48.15	116.188	POPTRI/CRADOU	Creek	633	Hutchinson	ID922	8/2/99	
Physconia americana	ID	Latah	FS447, Palouse River Rd. OHV play area/tailings	46.969	116.583	POPTRI	Seasonally Wet	859	Hutchinson	ID421	7/16/99	
Physconia americana	ID	Shoshone	Old Seibert Rd., Near Marble Ck	47.251	116.019	POPTRI/ALNRUB	River	707	Hutchinson	ID512	7/14/99	

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Physconia americana	ID	Bonner	E of Bridge on Hwy 2	48.74	116.503	POPTRI	River	639	Hutchinson	ID923	8/3/99	
Physconia americana	ID	Bonner	Priest Lake	48.74	116.855	POPTRI	Lake Margin	746	Hutchinson	ID931	7/31/99	
Physconia americana	ID	Shoshone	1 km N. of Clarkia USFS Office	47.032	116.267	POPTRI	Seasonally Wet	848	Hutchinson	ID412	7/21/99	
Physconia americana	ID	Clearwtr	2 km S of Greer/ Confl of Lolo/Clearwtr	46.372	116.17	POPTRI	Creek	332	Hutchinson	ID222	6/27/99	
Physconia americana	ID	Bonner	South End off Hwy 2	48.502	116.461	POPTRI	Lake Margin	636	Hutchinson	ID933	8/2/99	
Physconia americana	ID	Latah	5 miles east of Emida	47.153	116.531	POPTRI	Creek	850	Hutchinson	ID422	8/3/99	
Physconia americana	ID	Shoshone	FS208 N of Prichard, Avery Picnic area	47.688	115.929	BETPAP/POPTRI	River	745	Hutchinson	ID812	7/24/99	
Physconia americana	ID	Kootenai	E of Trestle Ck	47.747	116.429	RHAPUR/POPTRI	River	858	Hutchinson	ID-723-01	7/30/99	ASU, OSC
Physconia americana	ID	Benewah	2.5 miles SE of St. Maries	47.272	116.581	POPTRI	River	648	Hutchinson	ID721	7/22/99	
Physconia americana	ID	Kootenai	Near Big Hank CG	47.819	116.092	POPTRI	River	822	Hutchinson	ID813	7/25/99	
Physconia americana	ID	Kootenai	Just E of Honeysuckle CG	47.733	116.473	ACEGLA/POPTRI/CRADOU	Creek	834	Hutchinson	ID-722-02	7/30/99	SRP, OSC
Physconia americana	ID	Clearwtr	N. of Moose Ck/Kelly Ck	46.767	115.095	POPTRI	Creek	1134	Hutchinson	ID633	7/12/99	

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Physconia americana	ID	Shoshone	Big Fish Bridge, E of St. Joe	47.315	116.349	ACEGLA/POPTRI/PHYMAL	River	673	Hutchinson	ID711	7/23/99	
Physconia americana	ID	Kootenai	Off FS208, approx. 5 mi N of Pritchard	47.709	115.973	ALNRUB/POPTRI	Creek	760	Hutchinson	ID822	7/24/99	
Physconia americana	ID	Kootenai	FS206, approx. 3 miles E of Hayden Lk	47.797	116.64		Creek	784	Hutchinson	ID731	7/29/99	
Physconia americana	ID	Kootenai	Rd 97 to Anderson Lake/near Springston CG	47.482	116.728		Wetland	647	Hutchinson	ID713	7/28/99	
Physconia americana	ID	Shoshone	Huckleberry CG/Hwy50	47.266	116.091	POPTRI	River	692	Hutchinson	ID811	7/23/99	
Physconia americana	ID	Clearwtr	Kelly Creek Island, Btwn Blck Cnyn & Kelly RSta	46.713	115.182	POPTRI	Creek	892	Hutchinson	ID622	7/11/99	
Physconia americana	ID	Clearwtr	Near Kelly Forks RS	46.721	115.087	POPTRI	Wetland	962	Hutchinson	ID621	7/10/99	
Physconia americana	ID	Kootenai	jct of Rds 209/422	47.721	116.383	POPTRI	Creek	800	Hutchinson	ID733	7/30/99	
Physconia americana	ID	Benewah	Lake Chacolet, Hwy 5	47.35	116.7	POPTRI	Lakeshore	650	Hutchinson	FP171	8/9/99	
Physconia americana	ID	Idaho	Johnson Bar CG	46.1	115.55	POPTRI	Floodplain	461	Hutchinson	FP123	6/24/99	
Physconia americana	ID	Shoshone	North of Big Creek CG	47.305	116.118	RHAPUR	Creek	740	Hutchinson	ID821	7/23/99	
Physconia americana	ID	Bonner	Trail to Upper Priest Lake	48.8	116.91	POPTRI	Lake Margin	748	Martin	FP192		

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Physconia americana	ID	Idaho		46.15	115.985			365	McCune	10151		MCC
Physconia americana	ID	Idaho	Near Kooskia	46.15	115.985	POPTRI	Floodplain	365	McCune	10153	3/14/79	MCC
Physconia americana	ID	Shoshone	13 km N of Kellogg	47.635	116.117	POPTRI	Mouth of Coal Ck	690	McCune	16546	8/1/87	MCC
Physconia americana	ID	Kootenai	N. Fk of the CDA	47.718	116.384	POPTRI	Floodplain	700	McCune	21083	9/1/93	MCC
Physconia americana	ID	Shoshone	Beaver Creek	47.601	115.935	POPTRI	mouth of Trail Ck	1065	McCune	16517	8/1/87	MCC
Physconia americana	MT	Flathead	East end of McDonald Lake, Glacier NP	48.651	113.868	POPTRI	Lake Margin	960	McCune	12378	7/23/82	MCC
Physconia americana	OR	Linn	Hwy 126	44.4	122	POPTRI	Seasonally Wet/Lakesho	965	Hutchinson	FP213		
Pseudocyphellaria anomala	ID	Latah	Big Sand Ck	46.31	114.52				Anderegg	2648	7/28/74	ID
Pseudocyphellaria anomala	ID	Idaho	Hillside S of Eldorado Ck	46.29	115.66	on Abies twig	Mixed conifer forest	1086	Gray	1202	5/27/96	ID
Pseudocyphellaria anomala	ID	Clearwtr	Just W of Lolo Ck			on branch	Mixed conifer forest	927	Gray	725		
Pseudocyphellaria anomala	ID	Shoshone	Rd 301/east of Bridge at jct w/1905	47.005	116.165	ABGR	Creek	937	Hutchinson	ID-533-02	7/15/99	SRP
Pseudocyphellaria anomala	ID	Clearwtr	Kelly Crk Island, Btwn Blck Cnyn & Kelly RS	46.713	115.182	POPTRI	Creek	892	Hutchinson	ID-622-08	7/11/99	OSC
Pseudocyphellaria anomala	ID	Bonner	Grouse Mtn	48.18	116.46			853	Schroeder	1668	6/13/71	ID

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Pseudocyphellaria anomala	ID	Bonner	Selkirk Mtns, Kaniksu NF	0.0167	0.0167			762	Schroeder	2070	5/22/72	ID
Pseudocyphellaria anomala	ID	Lewis	Lapwai Ck	0.0167	0.0167			853	Schroeder	891	7/14/70	ID
Pseudocyphellaria anomala	MT	Lake	Swan Valley	47.969	113.919	ABGR	ABGR Forest	960	McCune	17632	9/1/89	MCC
Pseudocyphellaria anomala	MT	Lake	Near Mission Ck	47.326	113.969	rotton wood	Mixed conifer forest	1066	Sweet	8009	7/1/77	MCC
Pseudocyphellaria anthrapsis	ID	Clearwtr	Aquarius RNA	46.85	115.67	THPL	TSHE habitat	510	A. DeBolt	1257	7/17/89	RR
Pseudocyphellaria anthrapsis	ID	Clearwtr	Aquarius RNA	46.85	115.67	THPL	TSHE habitat	510	A. DeBolt	1275	7/17/89	RR
Pseudocyphellaria anthrapsis	ID	Mendocina	Spyrock Rd					1031	Anderegg, et al.	3303	8/15/75	ID
Pseudocyphellaria anthrapsis	ID	Clearwtr				On fallen THPL		778	Gray	364	8/26/94	ID
Pseudocyphellaria anthrapsis	ID	Clearwtr						519	Gray	750	7/15/95	ID
Pseudocyphellaria anthrapsis	ID	Clearwtr						580	Gray	749	7/15/95	ID
Pseudocyphellaria anthrapsis	ID	Idaho						439	Gray	705	5/29/95	ID
Pseudocyphellaria anthrapsis	ID	Idaho	T33N R6E SY 1/4 of the NE 1/4 Sec 22					488	Gray	182	4/25/94	ID
Pseudocyphellaria anthrapsis	ID	Idaho	7 km W of Lowell			ALRU	Two Shadows Ck	500	Rosentreter	1174	3/14/79	RR

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Pseudocyphellaria anthrapsis	ID	Idaho	Lochsa R.	46	115.52	THPL	Old growth THPL forest	610	Rosentreter	9123	2/22/95	RR
Pseudocyphellaria anthrapsis	ID	Bonner	Near Roosevelt Cedar Grove	48.42	116.9	Bark	THPL-TSHE forest	800	Rosentreter	11155	7/16/97	RR
Pseudocyphellaria anthrapsis	ID	Clearwtr	Aquarius Research Natural Area					500	Sarah C. Walker & Lichthar	43	6/16/95	ID
Pseudocyphellaria anthrapsis	ID	Clearwtr	Confluence of Elk Ck and N Fk Clearwtr	46.68	116.21	deciduous shrubs	Conifer forest	363	Schroeder	L1411	3/27/71	ID, OSC
Pseudocyphellaria anthrapsis	ID	Clearwtr	Quartz Ck					573	Schroeder	L2165	10/1/72	ID
Pseudocyphellaria anthrapsis	ID	Clearwtr	N. Canyon River					503	Schroeder	1618	10/27/73	ID
Pseudocyphellaria anthrapsis	ID	Clearwtr	N Middle Quartz Ck						Schroeder	L2165	10/1/72	ID
Pseudocyphellaria anthrapsis	ID	Clearwtr	St. Joe NF						Schroeder	L1473	3/27/71	ID
Pseudocyphellaria anthrapsis	ID	Clearwtr	St. Joe NF						Schroeder	L1448	3/27/71	ID
Pseudocyphellaria anthrapsis	ID	Idaho	Selway River						Schroeder	L1766	7/28/71	ID
Pseudocyphellaria anthrapsis	ID	Idaho	SW of Lowell, Nez Perce NF					512	Schroeder	L1731	7/8/71	ID
Pseudocyphellaria anthrapsis	ID	Idaho	Glover Ck Selway R						Schroeder	3098	8/22/74	ID

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Pseudocyphellaria anthrapsis	ID	Idaho	Clearwtr NF						Schroeder	L1714	7/6/71	ID
Pseudocyphellaria anthrapsis	ID	Idaho	Clearwtr NF						Schroeder	L1698	7/6/71	ID
Pseudocyphellaria anthrapsis	ID	Idaho	Lochsa R.						Schroeder	L1704	7/6/71	ID
Pseudocyphellaria anthrapsis	ID	Idaho	Selway R.						Schroeder	L1992	5/18/72	ID
Pseudocyphellaria anthrapsis	ID	Idaho	Clearwtr NF						Schroeder	L1717	7/6/71	ID
Pseudocyphellaria anthrapsis	ID	Idaho					Conifer forest		Schroeder	L1731	7/8/71	ID
Pseudocyphellaria anthrapsis	ID	Idaho	O'Hara CG	46.08	115.51		Selway River	477	Wagner	860	5/18/79	OSC
Pseudocyphellaria anthraspis	ID	Shoshone	1 km N. of Clarkia USFS Office	47.032	116.267	ABGR	Seasonally Wet	848	Hutchinson	ID412	7/21/99	
Pseudocyphellaria anthraspis	ID	Idaho	1/2 mile E of Lowell	46.149	115.595	THPL	Creek	446	Hutchinson	ID221	6/25/99	
Pseudocyphellaria anthraspis	ID	Clearwtr	FS247, confl. Beaver Ck and NFClrwtr	46.841	115.623	ALNRUB/THPL	Creek	518	Hutchinson	ID521	7/9/99	
Pseudocyphellaria anthraspis	ID	Clearwtr	Black Canyon/Confl w/Kelly Creek	46.719	115.257	PHILEW	River	842	Hutchinson	ID613	7/10/99	
Pseudocyphellaria anthraspis	ID	Idaho	Island after Johnson Bar CG	46.09	115.538	PYSMAL/RHAPUR	River	458	Hutchinson	ID-223-03	7/5/99	SRP
Pseudocyphellaria anthraspis	ID	Clearwtr	Cold Ck CG	46.721	115.301	POPTRI	Wetland	810	Hutchinson	ID612	7/9/99	

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Pseudocyphellaria anthraspis	ID	Idaho	approx. 1 mile E on trail from Race Creek CG	46.043	115.252	THPL/HOL DIS	Creek	533	Hutchinson	ID322	7/3/99	
Pseudocyphellaria anthraspis	ID	Idaho	approx. 0.511 miles E of Selway TH at Race Ck	46.043	115.269	THPL/ABGR /RHAPUR	River	537	Hutchinson	ID-313-01	7/3/99	OSC
Pseudocyphellaria anthraspis	ID	Idaho	Just upstream from Rock Island	46.078	115.418	Litter	River	511	Hutchinson	ID311	6/24/99	
Pseudocyphellaria anthraspis	ID	Idaho	On Hwy 12 E of Lowell	46.21	115.546	RHAPUR/A LNRUB	Creek	494	Hutchinson	ID232	6/26/99	
Pseudocyphellaria anthraspis	ID	Idaho	South of Selway River Road, near falls	46.045	115.297	ACEDOU/A BGR	Creek	539	Hutchinson	ID321	7/2/99	
Pseudocyphellaria anthraspis	ID	Clearwtr	Aquarius CG	46.841	115.619	ALNRUB/T HPL/RHAPU R	River	513	Hutchinson	ID513	7/20/99	
Pseudocyphellaria anthraspis	ID	Idaho	Across the road from Johnson Bar	46.103	115.556	POPTRI/AB GR	Creek	485	Hutchinson	ID233	7/5/99	
Pseudocyphellaria anthraspis	ID	Idaho	0.5 miles E on Selway trail from Race Creek	46.044	115.273	BETPAP	Seep	551	Hutchinson	ID332	7/3/99	
Pseudocyphellaria anthraspis	ID	Idaho	At the end of the Selway River Road	46.044	115.284	THPL	Creek	529	Hutchinson	ID-331-03	7/2/99	OSC
Pseudocyphellaria anthraspis	ID	Idaho	Pete King Rd (FS453)	46.177	115.606	POPTRI	Creek	532	Hutchinson	ID231	6/24/99	
Pseudocyphellaria anthraspis	ID	Clearwtr	NFk Clwtr FS700 N of Aquarius CG	46.87	115.62	POPTRI	Creek	601	Hutchinson	FP151	8/20/99	

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Pseudocyphellaria anthraspis	ID	Idaho	Johnson Bar CG	46.1	115.55	POPTRI	Floodplain	461	Hutchinson	FP123	6/24/99	
Pseudocyphellaria anthraspis	ID	Clearwtr	N Fk of the Clwtr	46.85	115.63	POPTRI	Creek	510	Hutchinson	FP152	8/20/99	
Pseudocyphellaria anthraspis	ID	Idaho	Glade Ck CG	46.22	115.53	deciduous shrubs	THPL-ABGR forest	580	McCune	11877	9/2/82	MCC
Pseudocyphellaria anthraspis	ID	Idaho	7 km W of Lowell	46.13	115.67	ALRU bark	Two Shadows Ck	500	McCune	10181	3/14/79	MCC
Pseudocyphellaria anthraspis	ID	Clearwtr	Aquarius RNA	46.85	115.67	TAXBRE branches	N Fk of the Clearwtr River	510	McCune	18559	8/1/90	MCC
Pseudocyphellaria anthraspis	ID	Idaho	Pete King Rd (FS453)	46.177	115.606	POPTRI bark	open shrubby creek	580	McCune	6252	3/22/75	MCC
Pseudocyphellaria anthraspis	ID	Clearwtr	N FK of the Clearwtr	46.83	115.167	Conifer	mouth of Hidden Ck	1020	McCune	18499	8/1/90	MCC
Ramalina dilacerata	ID	Idaho	Johnson Bar CG	46.1	115.55	POPTRI	Floodplain	461	Hutchinson	FP123	6/24/99	
Ramalina dilacerata	ID	Pend Oreille	Boswell Ranch	48.35	117.05	POPTRI	Wet Meadow	739	Hutchinson	FP391	8/11/99	
Ramalina dilacerata	ID	Idaho	FS14/1858	45.9	115.63	ALRU	Creek	1223	Hutchinson	FP122	8/22/99	
Ramalina dilacerata	ID	Bonner	Johnson Creek CG, W of Clark Fork	48.14	116.23	CRADOU	River	629	Hutchinson	ID913	8/3/99	
Ramalina dilacerata	ID	Shoshone	1 km N. of Clarkia USFS Office	47.032	116.267	CRADOU/BETPAP/ABGR	Seasonally Wet	848	Hutchinson	ID-412-01	7/21/99	SRP

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Ramalina dilacerata	ID	Shoshone	North of Big Creek CG	47.305	116.118	RHAPUR/CRADOU	Creek	740	Hutchinson	ID821	7/23/99	
Ramalina dilacerata	ID	Idaho	Wilderness Gateway CG trailhead to hotsprings	46.337	115.314	RHAPUR/AMEALN	Creek	637	Hutchinson	ID323	7/4/99	
Ramalina dilacerata	ID	Idaho	0.5 miles E on Selway trail from Race Creek	46.044	115.273	ACEGLA	Seep	551	Hutchinson	ID332	7/3/99	
Ramalina dilacerata	ID	Kootenai	E of Trestle Ck	47.747	116.429	CRADOU/POPTRI/RHAPUR	River	858	Hutchinson	ID723	7/30/99	
Ramalina dilacerata	ID	Kootenai	Just E of Honeysuckle CG	47.733	116.473	Hardwoods and ABGR	Creek	834	Hutchinson	ID722	7/30/99	
Ramalina dilacerata	ID	Benewah	2.5 mi SE of St. Maries	47.272	116.581	hardwoods	River	648	Hutchinson	ID721	7/22/99	
Ramalina dilacerata	ID	Idaho	On Hwy 12 E of Lowell	46.233	115.408	BETPAP	Creek	558	Hutchinson	ID333	7/4/99	
Ramalina dilacerata	ID	Idaho	approx. 1 mile E on trail from Race Crk CG	46.043	115.252	AMEALN	Creek	533	Hutchinson	ID322	7/3/99	
Ramalina dilacerata	ID	Idaho	Wilderness Gateway CG	46.339	115.315	RHAPUR/AMEALN	River	629	Hutchinson	ID-312-01	6/25/99	OSC
Ramalina dilacerata	ID	Kootenai	FS206, approx. 3 miles E of Hayden Lk	47.797	116.64	hardwoods	Creek	784	Hutchinson	ID731	7/29/99	
Ramalina dilacerata	ID	Kootenai	Near Big Hank CG	47.819	116.092	ABGR/CRADOU	River	822	Hutchinson	ID-813-01	7/25/99	SRP

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Ramalina dilacerata	ID	Idaho	Across the road from Johnson Bar	46.103	115.556	Maple cultivar/BET PAP	Creek	485	Hutchinson	ID-233-01	7/5/99	OSC
Ramalina dilacerata	ID	Idaho	On Hwy 12 E of Lowell	46.21	115.546	RHAPUR	Creek	494	Hutchinson	ID232	6/26/99	
Ramalina dilacerata	ID	Idaho	Pete King Rd (FS453)	46.177	115.606	RHAPUR	Creek	532	Hutchinson	ID-231-01, ID-231-02	6/24/99	OSC, WTU
Ramalina dilacerata	ID	Kootenai	approx. 8 km E of the north end of Hayden Lake	47.823	116.655	hardwoods	Creek	739	Hutchinson	ID732	7/29/99	
Ramalina dilacerata	ID	Shoshone	Huckleberry CG/Hwy50	47.266	116.091	ACEGLA/RHAPUR/CRADOU	River	692	Hutchinson	ID811	7/23/99	
Ramalina dilacerata	ID	Idaho	Island after Johnson Bar CG	46.09	115.538	CRADOU/RHAPUR	River	458	Hutchinson	ID-223-01, ID-223-02	7/5/99	SRP, OSC
Ramalina dilacerata	ID	Kootenai	jct of Rds 209/422	47.721	116.383	ALNRUB	Creek	800	Hutchinson	ID733	7/30/99	
Ramalina dilacerata	ID	Idaho	1/2 mile E of Lowell	46.149	115.595	ALNRUB	Creek	446	Hutchinson	ID221	6/25/99	
Ramalina dilacerata	ID	Idaho	Hwy 14 / South Fork CG	45.832	115.949	shrubs	River	701	Hutchinson	ID-211-01, ID-211-02	6/23/99	SRP, WTU
Ramalina dilacerata	ID	Bonner	South End off Hwy 2	48.502	116.461	CRADOU	Lake Margin	636	Hutchinson	ID933	8/2/99	
Ramalina dilacerata	ID	Idaho	approx. 0.511 miles E of Selway TH at Race Ck	46.043	115.269	ACEGLA/RHAPUR/CRADOU	River	537	Hutchinson	ID313	7/3/99	

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Ramalina dilacerata	ID	Kootenai	FS412 N of Berlin Flats	47.818	115.958	BETPAP	Creek	884	Hutchinson	ID833	7/25/99	
Ramalina dilacerata	ID	Clearwtr	Just N of confluence w/Kelly Ck	46.723	115.085	Hardwoods	Creek	967	Hutchinson	ID-631-01	7/10/99	OSC
Ramalina dilacerata	ID	Clearwtr	FS247, confl. Beaver Ck and NFClrwtr	46.841	115.623	ALNRUB	Creek	518	Hutchinson	ID521	7/9/99	
Ramalina dilacerata	ID	Shoshone	Just S of Hwy 50	47.247	116.02	ALRU and shrubs	Creek	698	Hutchinson	ID-523-01	7/14/99	WTU
Ramalina dilacerata	ID	Shoshone	FS350 accross Hwy 50 from Huckleberry CG	47.262	116.087	RHAPUR/CRADOU	Creek	751	Hutchinson	ID-831-01, ID-832-02	7/22/99	OSC
Ramalina dilacerata	ID	Benewah	N of 6/3 jct, 1 km S of Mashburn Sta.	47.183	116.497	POPTRI/CRADOU/Alnus	River	786	Hutchinson	ID-413-04, ID-413-05, ID-413-06	7/21/99	OSC, WTU, SRP
Ramalina dilacerata	ID	Kootenai	FS208 N of Big Hank CG	47.876	116.109	AMEALN	Creek	852	Hutchinson	ID832	7/25/99	
Ramalina dilacerata	ID	Bonner	Near Priest River Experimental Sta.	48.332	116.85	Alnus/ PIEN/ POPTRI	Wetland	683	Hutchinson	ID921	7/31/99	
Ramalina dilacerata	ID	Shoshone	FS321, Marble Ck Rd	47.175	116.099	RHAPUR	Creek	937	Hutchinson	ID532	7/15/99	
Ramalina dilacerata	ID	Shoshone	FS9 SE of Prichard, 1.5 miles E of Bear	47.595	115.771	CRADOU	Creek	1015	Hutchinson	ID823	7/25/99	
Ramalina dilacerata	ID	Latah	Rd 447, N of Clarkia	47.065	116.326	ABGR/POPTRI	Creek	835	Hutchinson	ID433	7/21/99	
Ramalina dilacerata	ID	Shoshone	Old Seibert Rd., Near Marble Ck	47.251	116.019	hardwoods	River	707	Hutchinson	ID512	7/14/99	

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Ramalina dilacerata	ID	Shoshone	Rd 301/east of Bridge at jct w/1905	47.005	116.165	Alnus	Creek	937	Hutchinson	ID533	7/15/99	
Ramalina dilacerata	ID	Shoshone	Big Fish Bridge, E of St. Joe	47.315	116.349	hardwoods	River	673	Hutchinson	ID711	7/23/99	
Ramalina dilacerata	ID	Benewah	approx 5 miles E of Emida	47.078	116.56	CRADOU	Creek	904	Hutchinson	ID-432-07	8/4/99	SRP
Ramalina dilacerata	ID	Kootenai	Off FS208, approx. 5 mi N of Pritchard	47.709	115.973	Hardwoods	Creek	760	Hutchinson	ID822	7/24/99	
Ramalina dilacerata	ID	Latah	5 miles east of Emida	47.153	116.531	CRADOU	Creek	850	Hutchinson	ID422	8/3/99	
Ramalina dilacerata	ID	Clearwtr	Near Kelly Forks RS	46.721	115.087	AMAL/ CRADOU	Wetland	962	Hutchinson	ID621	7/10/99	
Ramalina dilacerata	ID	Clearwtr	Cold Ck CG	46.721	115.301	RHAPUR	Wetland	810	Hutchinson	ID612	7/9/99	
Ramalina dilacerata	ID	Latah	FS447, Palouse River Rd. OHV play area	46.969	116.583	POPTRI/Alnus	Seasonally Wet	859	Hutchinson	ID-421-01	7/16/99	OSC
Ramalina dilacerata	ID	Idaho	Kooskia	46.15	115.985	Crataegus	Floodplain	365	McCune	10149	3/14/79	MCC
Ramalina dilacerata	ID	Idaho	Two Shadows Ck	46.134	115.668	ALRU	Floodplain	502	McCune	10169	3/14/79	MCC
Ramalina dilacerata	ID	Idaho	Glade Ck CG	46.217	115.534	deciduous shrubs	Floodplain	580	McCune	11868	9/1/82	MCC
Ramalina dilacerata	ID	Idaho	S Fk Clearwtr CG	45.835	115.935	Shrubs	Floodplain	780	McCune	12103	9/2/82	MCC
Ramalina dilacerata	ID	Bonner	N end of Priest Lk	48.735	116.852	Alnus bark	Lake Margin	745	McCune	22563	8/1/95	MCC
Ramalina dilacerata	ID	Idaho	Pete King Ck	46.167	115.601	Shrubs	Floodplain	579	McCune	6339	3/1/75	MCC
Ramalina dilacerata	ID	Boundary	Upper Priest Lake RNA	48.81	116.9		Lake Margin	780	Rosentreter	13470	8/1/98	RR

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Ramalina dilacerata	ID	Boundary	12 miles NW of Bonner's Ferry	48.77	116.48		THPL-PIMO E facing slope	600	Rosentreter	7030		RR
Ramalina obtusata	ID	Valley	Middle fork of the Salmon R, Hospital bar	44.83	114.83	rock	overhanging cliff	1202	Rosentreter	8579		RR
Ramalina obtusata	MT	Ravalli	Mill Creek canyon	46.317	114.234	ABGR bark	Mill Creek Canyon	1325	McCune	11395	5/29/81	MCC
Ramalina obtusata	MT	Flathead	E end of McDonald Lk	48.651	113.868	POPTRI	Floodplain	960	McCune	12373	7/23/82	MCC
Ramalina obtusata	MT	Lake	N Crow Ck	47.585	114	POPTRI	Bottomland	1190	McCune	16701	7/1/87	MCC
Ramalina obtusata	MT	Lake	Swan Valley	47.902	113.835	ABGR	2nd growth conifer for	990	McCune	17626	8/1/89	MCC
Ramalina obtusata	MT	Lake	Swan Valley	47.685	114.084	Picea-Betula	Swamp	890	McCune	17887	8/1/89	MCC
Ramalina obtusata	MT	Flathead	N fk of the Flathead R	48.718	114.251	Picea twigs	Floodplain forest	1050	McCune	19190	7/1/91	MCC
Ramalina obtusata	MT	Lake	Below Mission Ck Falls	47.326	113.969	ABGR bark	Mixed conifer forest	1066	McCune	7972	7/1/77	MCC
Ramalina obtusata	MT	Lake	Swan River, nr Porcupine Ck	47.885	113.868	Picea twigs	Floodplain forest	944	McCune	8593	8/25/77	MCC
Ramalina obtusata	MT	Lake	Pleasant CG	47.818	113.835	Picea twigs	Floodplain forest	944	McCune	9147	9/2/77	MCC
Ramalina obtusata	MT	Flathead		0.0167	0.0167			0	Williams	67c		UC

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Ramalina obtusata	OR	Wallowa	E fk of the Wallowa R	45.267	117.208	Conifer	PIEN-PSME forest	1345	McCune	23983	12/1/97	MCC
Ramalina obtusata	MT	Flathead	Glacier NP	48.985	114.251	Picea	Head of Kintla Lk	1225	McCune	14287	8/13/84	MCC
Ramalina pollinaria	ID	Boundary	Kootenai Wildlife Refuge	48.74	116.413	POPTRI	River	532	Hutchinson	ID-912-02, ID-912-04, ID-912-03	8/1/99	OSC, OSC, SRP
Ramalina pollinaria	ID	Bonner	South End off Hwy 2	48.502	116.461	CRADOU	Lake Margin	636	Hutchinson	ID-933-04, ID-933-05	8/2/99	OSC
Ramalina pollinaria	ID	Bonner	NW of Clark Fork	48.15	116.188		Creek	633	Hutchinson	ID-922-01	8/2/99	WTU
Ramalina pollinaria	MT	Lake	Swan River near Porcupine Ck	47.885	113.852	Picea	Creek	945	McCune	13787	7/7/83	MCC
Ramalina pollinaria	MT	Lake	Near N Crow Ck	47.585	114	Conifer	Bottomland	1190	McCune	16710	7/1/87	MCC
Ramalina pollinaria	MT	Lake	S of Hwy 35	47.685	114.084	Picea-Betula	Swamp	890	McCune	17885	8/1/89	MCC
Ramalina pollinaria	MT	Lake	Mission Ck	47.326	113.969	ABGR bark	Bottomland	1066	McCune	7971	7/28/77	MCC
Ramalina pollinaria	MT	Lake	near Pt Pleasant CG	47.818	113.835	Picea twigs	Floodplain forest	944	McCune	9146	9/2/77	MCC
Ramalina pollinaria	MT	Flathead		0.0167	0.0167			0	Williams	67a		UC
Ramalina pollinaria	MT	Flathead	Mission Falls Area, Flathead Indian Reservation			PSME Bark	PSME to THPL/TSHE Forest	970	Rosentreter	2151	7/31/81	RR

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Ramalina pollinaria	MT	Flathead	Mssion Falls Area			Twig	PSME, THPL, TSHE forest	970	Rosentreter	RR-MT-70	7/1/77	RR
Ramalina subleptocarpha	ID	Latah	0.5 mi W of Harvard, just W of Harvard/Dreary cutoff Rd	46.92	116.74	ABGR branch	Roadside	780	Gray	2171	7/15/00	BPM
Ramalina subleptocarpha	ID	Latah	Hwy 99 N of	46.642	116.72	CRADOU/P	Creek	757	Hutchinson	ID431	7/19/99	
Ramalina subleptocarpha	ID	Idaho	Heart of the Monster Park, on hwy 12, n of Kooskia	46.229	116.008	CRADOU/ POPTRI	River	367	Hutchinson	ID213	6/26/99	
Ramalina subleptocarpha	ID	Idaho	Near Stites	46.082	115.979	Prunus	River	410	Hutchinson	ID-212-02, ID-213-03, ID-212-04	6/23/99	OSC, SRP/ OSC, OSC
Ramalina subleptocarpha	ID	Clearwtr	about 2 km S of Greer/ Confl of Lolo/Clearwtr	46.372	116.17	CRADOU/P OPTRI	Creek	332	Hutchinson	ID-222-01, ID-222-03	6/27/99	SRP
Ramalina subleptocarpha	ID	Latah	FS447, Palouse River Rd. OHV play area/tailings	46.969	116.583	POPTRI/ PIEN	Seasonally Wet	859	Hutchinson	ID-421-05, ID-421-06	7/16/99	WTU, OSC
Ramalina subleptocarpha	ID	Latah	Rd 447, N of Clarkia	47.065	116.326	POPTRI	Creek	835	Hutchinson	ID-433-04	7/21/99	OSC
Ramalina subleptocarpha	ID	Benewah	2.5 miles SE of St. Maries	47.272	116.581	CRADOU/ POPTRI	River	648	Hutchinson	ID-721-02, ID-721-03	7/22/99	WTU, OSC

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Ramalina supleptocarpha	ID	Latah	Hwy 99 N of Kendrick	46.642	116.72	POPTRI	Creek	757	Hutchinson	ID-431-05, ID-431-06	7/19/99	WTU, OSC
Ramalina supleptocarpha	ID	Latah	Hwy 6 between Harvard and Princeton	46.92	116.75	POPTRI-PHAARU	Seasonally Wet	775	Hutchinson	FP141	8/7/99	
Ramalina subleptocarpha	ID	Idaho	Kooskia	46.15	115.985	Crataegus	Floodplain	426	McCune	10139	3/14/79	MCC
Ramalina subleptocarpha	WA	Whitman		46.715	118.197			805	Gray	1493		BPM
Ramalina thrausta	ID	Clearwtr	Aquarius RNA	46.85	115.67	THPL-TSHE	Riparian Forest	610	DeBolt	1271	7/1/89	RR
Ramalina thrausta	ID	Idaho	Hillside S of Eldorado Ck	46.29	115.66	Abies twig	Mixed conifer forest	1112	Gray	1205	5/27/96	OSC
Ramalina thrausta	ID	Shoshone	Rd 301/east of Bridge at jct w/1905	47.005	116.165	PIEN	Creek	937	Hutchinson	ID533	7/15/99	
Ramalina thrausta	ID	Idaho	1/2 mile E of Lowell	46.149	115.595	ALNRUB	Creek	446	Hutchinson	ID221	6/25/99	
Ramalina thrausta	ID	Latah	Rd 447, N of Clarkia	47.065	116.326	ABGR/ THPL/POPTRI	Creek	835	Hutchinson	ID433	7/21/99	
Ramalina thrausta	ID	Latah	FS447, Palouse River Rd. OHV play area	46.969	116.583	PIEN	Seasonally Wet	859	Hutchinson	ID421	7/16/99	
Ramalina thrausta	ID	Kootenai	FS412 N of Berlin Flats	47.818	115.958	PIEN/ABGR	Creek	884	Hutchinson	ID-833-02	7/25/99	OSC
Ramalina thrausta	ID	Kootenai	Just E of Honeysuckle CG	47.733	116.473	POPTRI	Creek	834	Hutchinson	ID722	7/30/99	

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Ramalina thrausta	ID	Bonner	Priest Lake	48.74	116.855	ABGR	Lake Margin	746	Hutchinson	ID931	7/31/99	
Ramalina thrausta	ID	Benewah	approx 5 miles E of Emida	47.078	116.56	PIEN/THPL/ POPTRI	Creek	904	Hutchinson	ID432	8/4/99	
Ramalina thrausta	ID	Idaho	Just upstream from Rock Island	46.078	115.418	THPL	River	511	Hutchinson	ID311	6/24/99	
Ramalina thrausta	ID	Bonner	Near Priest River Experimental Sta.	48.332	116.85	PIEN/CRAD OU	Wetland	683	Hutchinson	ID-921-04	7/31/99	OSC
Ramalina thrausta	ID	Kootenai	Near Big Hank CG	47.819	116.092	ABGR/CRA DOU/POPTR I	River	822	Hutchinson	ID813	7/25/99	
Ramalina thrausta	ID	Idaho	South of Selway River Road, near falls	46.045	115.297	THPL/ABGR	Creek	539	Hutchinson	ID321	7/2/99	
Ramalina thrausta	ID	Kootenai	E of Trestle Ck	47.747	116.429	ABGR	River	858	Hutchinson	ID723	7/30/99	
Ramalina thrausta	ID	Idaho	approx. 0.511 miles E of Selway TH at Race Ck	46.043	115.269	Cornus	River	537	Hutchinson	ID313	7/3/99	
Ramalina thrausta	ID	Clearwtr	Near Cedars CG	46.873	115.077	Abies/PIEN	Seasonally Wet	1114	Hutchinson	ID623	7/12/99	
Ramalina thrausta	ID	Kootenai	Off FS208, approx. 5 mi N of Pritchard	47.709	115.973	hardwoods	Creek	760	Hutchinson	ID822	7/24/99	
Ramalina thrausta	ID	Shoshone	1 km N. of Clarkia USFS Office	47.032	116.267	ABGR/PIEN/ POPTRI	Seasonally Wet	848	Hutchinson	ID-412-07	7/21/99	SRP
Ramalina thrausta	ID	Clearwtr	Aquarius CG	46.841	115.619	ABGR/THPL	River	513	Hutchinson	ID-513-02	7/20/99	OSC

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Ramalina thrausta	ID	Idaho	At the end of the Selway River Road	46.044	115.284	ABGR	Creek	529	Hutchinson	ID-331-01	7/2/99	WTU
Ramalina thrausta	ID	Clearwtr	N Fk of the Clwtr	46.85	115.63	THPL	Creek	510	Hutchinson	FP152	8/20/99	
Ramalina thrausta	ID	Bonner	Bridge on Hughs Fork	48.82	116.97	THPL	Creek	825	Hutchinson	FP194		
Ramalina thrausta	ID	Idaho	Nr Crooked Fork Rd, S Fk of the Clearwtr R	45.868	115.534		Cliffs above stream	1240	McCune	11696	9/2/82	MCC
Ramalina thrausta	ID	Idaho	Glade Ck CG, Lochsa R	46.217	115.534	Conifer	Glade Creek	580	McCune	11879	9/2/82	MCC
Ramalina thrausta	ID	Idaho	Shotgun Ck Rd Turnoff, crooked fork of the Lochsa	46.568	114.618	Conifer	River	1250	McCune	12135	9/3/82	MCC
Ramalina thrausta	ID	Idaho	1 km W. of Delta Grove	46.551	114.685	Conifer	Floodplain	1090	McCune	16992	7/1/86	MCC
Ramalina thrausta	ID	Clearwtr	Hidden Ck NF of the Clearwtr	46.835	115.167	ABLA	Valley bottom	1020	McCune	18539	8/1/90	MCC
Ramalina thrausta	ID	Clearwtr	N Fk of the Clearwtr, Aquarius CG	46.852	115.668	Conifer	Floodplain	510	McCune	18564	8/1/90	MCC
Ramalina thrausta	ID	Bonner	N end of Priest Lk nr mouth of upper Priest R.	48.735	116.868	Picea	THPL/TSHE/POPTRI forest	745	McCune	22552	8/1/95	MCC
Ramalina thrausta	ID	Idaho	Selway R, Rock Island	46.08	115.423	THPL	Riverside	470	McCune	24663	6/1/99	MCC
Ramalina thrausta	ID	Latah	Laird Park CG	46.95	116.65		River Forest	1158	Rosentreter	8206	9/1/93	RR

Table A1. Relevant target species locations, continued.

Species	State	County	Location	Lat N	Long W	Substrate	Habitat	Elev	Coll	CollNo	Date	Herb.
Ramalina thrausta	ID	Idaho	Glade Ck CG, Lochsa R	46.22	115.53	THPL	near Creek		Rosentreter	4004	7/1/86	RR
Ramalina thrausta	ID	Bonner	Near Roosevelt Cedar Grove	48.42	116.9	THPL-TSHE	Forest	800	Rosentreter	11163	7/1/97	RR
Ramalina thrausta	ID	Boundary	12 miles NW of Bonner's Ferry	48.77	116.48		THPL-PIMO E facing slope	600	Rosentreter	7024	8/13/91	RR
Ramalina thrausta	ID	Idaho	Glade Ck Picnic Area	46.6	115.52	THPL	Riparian Forest	366	Rosentreter	9371	7/1/95	RR
Ramalina thrausta	ID	Idaho	1km W of Devoto Grove, and E of Powll Jct	46.58	114.63	THPL	THPL-TSHE forest	1440	Rosentreter	4007	7/1/96	RR
Ramalina thrausta	MT	Flathead	Glacier NP			tree trunk			Rosentreter	RR-MT-252	6/28/77	OSC, RR
Ramalina thrausta	WA	Pend Oreille	Boswell Ranch	48.35	117.05	PIEN	Wet Meadow	739	Hutchinson	FP391	8/11/99	

Appendix D

Climatic Affinities for Species

Oceanic Species

Bryoria friabilis
Bryoria glabra
Cetraria orbata
Cladonia albonigra
Evernia prunastri
Fuscopannaria leucostictoides
Fuscopannaria pacifica
Hypocenomyce castaneocinerea
Hypogymnia apinnata
Hypogymnia enteromorpha
Hypogymnia inactiva
Lobaria pulmonaria
Melanelia fuliginosa
Melanelia multispora
Nephroma helveticum
Nephroma laevigatum
Nephroma resupinatum
Nodobryoria oregana
Peltigera membranacea
Peltigera pacifica
Physconia americana
Pseudocyphellaria anomala
Pseudocyphellaria anthraspis
Ramalina dilacerata
Ramalina farinacea
Ramalina subleptocarpha
Sphaerophorus globosus
Usnea chaetophora
Usnea diplotypus
Usnea esperantiana
Usnea filipendula
Usnea glabrata
Usnea scabrata
Usnea subfloridana
Xanthoria hasseana
Xanthoria oregana
Xanthoria polycarpa

Suboceanic Species

Alectoria imshaugii
Alectoria sarmentosa
Bryoria capillaris
Bryoria pseudofuscescens
Bryoria tortuosa
Cetraria canadensis
Cetraria merrillii
Cetraria pallidula
Cetraria platyphylla
Cladonia squamosa
Cladonia umbricola
Collema curtisporum
Esslingeriana idahoensis
Hypogymnia imshaugii
Hypogymnia metaphysodes
Hypogymnia occidentalis
Leptogium cellulosum
Leptogium saturninum
Lobaria hallii
Melanelia subelegantula
Nephroma bellum
Nodobryoria abbreviata
Parmelia hygrophila
Parmeliopsis hyperopta

Continental Species

Bryoria fremontii
Bryoria lanestris
Bryoria simplicior
Cladonia cenotea
Cladonia sulphurina
Collema occultatum
Flavopunctelia soredica
Letharia vulpina
Melanelia elegantula
Melanelia subolivacea
Parmeliopsis ambigua
Peltigera aphthosa
Peltigera canina
Phaeophyscia ciliata
Phaeophyscia hirsuta
Phaeophyscia hirtella
Phaeophyscia nigricans
Physciella chloantha
Physciella melanchra
Usnea hirta
Usnea lapponica
Xanthoria fallax
Xanthoria montana

Widespread Species

Bryoria fuscescens
Candelaria concolor
Cetraria chlorophylla
Cladonia carneola
Cladonia chlorophaea
Cladonia coniocraea
Cladonia fimbriata
Cladonia ochrochlora
Collema furfuraceum
Hypocenomyce scalaris
Hypogymnia physodes
Hypogymnia tubulosa
Melanelia exasperatula
Melanelia glabra
Melanelia panniformis
Melanelia subargentifera
Melanelia subaurifera
Nephroma parile
Parmelia sulcata
Peltigera collina
Phaeophyscia orbicularis
Physcia adscendens
Physcia aipolia
Physcia biziana
Physcia stellaris
Physcia tenella
Physconia enteroxantha
Physconia perisidiosa
Platismatia glauca
Ramalina thrausta
Xanthoria candelaria
Xanthoria fulva
Xanthoparmelia cumberlandia

Appendix E

Data Sheets

Rare Riparian Lichens of Northern Idaho Data Sheet

Surveyor_____ Date_____
First initial, last name MM/DD/YY
Plot Number_____ State_____
Geographic region (1-9) stream order class (1-3) replicate (1-3)
For Geographic regions 1= SW most, stream order class 1= major tributaries
County_____
Stream Name_____ Sub-basin_____
Landowner: USFS BLM STATE Private
Priest, Kootenai, Pend Orielle, Clearwater, Coeur d'Alene, St. Joe, St. Maries, Salmon
Elevation_____ meters
Latitude_____
Longitude _____

Site Characteristics
River:
Floodplain gradient_____degrees (from map)
Width of active channel:_____meters (ocular estimate)
Width of Floodplain:_____ (from map)
Channel substrate: boulder_____% cobble/gravel_____% sand/silt_____% organic-rich_____%
Floodplain cross-section type (check one):

1. Incised with no floodplain_____
2. Floodplain on one side only with talus or colluvium on the other side _____
3. Floodplain on both sides of the channel_____
4. Multiple channels on a broad floodplain _____

Site (check all that are applicable):
Seep Creek River Wetland Seasonally Wet Lake Margin Bog/Fen
Cover Percents (ocular estimates of % of plot)

1. Canopy Cover:_____%
2. Substrate: Boulder_____% Cobble/Gravel_____% Sand/Silt_____%
   Organic Rich_____% Water_____%
3. Shrubs (by height): tall > 2m_____% medium 2m-5cm_____% ground < 5cm____%
   Grass_____% Sedge _____% Rush _____% Forbs _____%

Tree Cover by Size Class
(saplings = flexible main stem, midseral = top is still growing and there are few or no dead limbs in the upper ¼, late seral = flat top (pines), dead limbs in the upper ¼)

Cottonwoods:
Sapling_____% Mid-seral_____% Late-seral _____%
Most typical dbh _____ Largest dbh _____
Other Hardwoods:
Sapling_____% Mid-seral_____% Late-seral _____%
Most typical dbh _____ Largest dbh _____
Conifers:
Sapling_____% Mid-seral_____% Late-seral _____%
Most typical dbh _____ Largest dbh _____

Stand Basal Area: Take 5 wedge prism counts, one at plot center and one at approximately equidistant points within the plot. For circular plots, take one count at plot center and one count at each cardinal direction on the perimeter of the plot.

Basal Area Factor of the prism _____

	Species 1	Species 2	Species 3	Species 4	Species 5
Center	_____	_____	_____	_____	_____
Point 1	_____	_____	_____	_____	_____
Point 2	_____	_____	_____	_____	_____
Point 3	_____	_____	_____	_____	_____
Point 4	_____	_____	_____	_____	_____
Totals	_____	_____	_____	_____	_____
BA	_____	_____	_____	_____	_____

To get the BA, take the total number for each species and multiply by the BAF

Fill in attached plant list.

Comments:

Draw a map of the plot. Include all features such as gravel bars, vegetation changes, plot shape, etc.

Plant Indicator List
Date_____ Plot Number _____
Location_____

Dominant plant species: record dominant trees, shrubs grasses and forbs:
_____

Bryophytes: record % cover of plot: Soil/Rock_____% Epiphytic _____%
Lichens: record dominant epiphytes:_____

Vascular Plants:
0 = absent 1 = present 2 = abundant

Shrubs
Rhamnus purshiana _____
Crataegus sp._____
Menziesia ferruginea _____

Other
*Gymnocarpium dryopteris*_____
Lysichiton americanum _____
Nuphar polysephalum _____
Polygonum amphibium _____
Typha latifolia _____
Sphagnum with vascular plants _____
100% Sphagnum hummocks _____

Weeds
Centaurea maculosa _____
Centaurea solstitailis _____
*Cynoglossum*_____
Other Weeds (write in names)

Plot Number: Location:
Date:
Time:
<---All Macrolichens ----------> < ----------Target Species Only ---------- >

Species	Abund (1-4)	Substrate	Location on Substrate	Shelter (1-3)

Shelter
1 = exposed, no shade
2 = partial shade
3 = full shade

Abundance
1 = < 4 individuals
2 = 4-10 individuals
3 = > 10 individuals
4 = > ½ available substrate

Location on Substrate
Base, braches, twigs
Low bole (0.5- 1.0 m)
Mid bole (1-2 m)
Upper bole (>2 m)

Appendix F.

Data Dictionary for Northern Idaho Database

For Plot Data:

Surveyor: Name of person recording the data on the plot data form.
Plot number: Geographic region (1-9) Stream order class (1= large valley bottom rivers, 2 = major tributaries, 3 = minor tributaries), Replicate (1-3).
County: The County where the plot is located.
Stream Name: The stream or river along which the plot is located.
Landowner: USFS = United States Forest Service, BLM = Bureau of Land Management, State = Lands owned by the state of Idaho, PRIV = Private ownership, including Tribal Lands, and Lands owned by Timber Companies.
Date: Given as MM/DD/YY, two digit values for month, date, year.
State: The state where the plot is located.
Sub-basin: Major drainage for the river or stream where the plot is located.
Latitude: Given as degrees and decimal degrees.
Longitude: Given as degrees and decimal degrees.
Floodplain Gradient: Change in elevation/straightest length of river section (a 1 to 5 mile distance) near where the plot is located.
Width of Active Channel: An ocular estimate of the river or stream width at the plot, recorded in meters.
Channel Substrate: Percent of river channel that was in the plot that was boulders, cobble/gravel, sand/silt, and organic rich substrate. The records are limited by what was visible from the riverbank.
Floodplain Cross-section Type: Limited to one of the following choices: 1 = incised with no apparent floodplain; 2 = floodplain on one side only, with talus or colluvium on the other side; 3 = Floodplain on both sides of the channel; 4 = multiple channels on a broad floodplain.
Site Type: Derived from the sensitive plant site form, used by the USFS: 1 = Seep, 2 = Creek, 3 = River, 4 = Wetland, 5 = Seasonally Wet, 6 = Lake Margin, 7 = Bog/Fen.
Canopy Cover: An ocular estimate of the percent of space taken up by branches, twigs, and leaves or needles when standing in the forest looking up and estimating a percent of your circle of vision.
Cover percents:
A. Percent of the plot that is not included in the river bed, but is covered by boulders, cobble/gravel, sand/silt, organic rich, water, or litter.
B. Percent of the plot that is covered by vegetation divided into shrubs, grasses, forbs,
rushes. Shrubs were divided into three height classes: tall > 2 m; medium 5 cm to 2 meters; ground < 5 cm.
C. Percent of the plot with tree cover, divided into cover % of cottonwoods, other hardwoods, and conifers. The percent cover for each tree type was further divided into size classes: sapling = trees with a flexible main stem; mid-seral = trees where the top is still growing and there are few or no dead limbs in the upper quarter; late-seral = trees with flat tops (conifers) and/or dead limbs in the upper quarter.
Basal Area:
Basal area in conifers was estimated by multiplying the average number by basal area factor of the prism.
Basal area in hardwoods was estimated by multiplying the average number by the basal area factor of the prism.

For Lichen Community Data

Shelter
1 = exposed, no shade
2 = partial shade
3 = full shade
Abundance
1 = < 4 individuals
2 = 4-10 individuals
3 = > 10 individuals
4 = > ½ available substrate
Location on Substrate
Base, branches, twigs
Low bole (0.5- 1.0 m)
Mid bole (1-2 m)
Upper bole (>2 m)

Location Table

Species: Current scientific name for the lichen
Location: A brief description of where the site is located
Substrate: Species of tree or shrub the lichen was found on
Habitat: A very brief description of the habitat
Coll (Collector): The person who collected the lichen
CollNo (Collection Number): The number given to the specimen by the collector, generally a unique number, but there are exceptions. My collections include specimens that won't be curated, but are important to establish location and range of the target species, so they are included by plot number.
Date: The day/month/year the specimen was collected
Herb (herbarium): The herbarium where the specimen was deposited.