Appendix D. Voucher photograph taken of a Northern Leopard Frog metamorph at the Minidoka National Wildlife Refuge

Appendix E. Amphibian and reptile multiple observation form used for road driving observations.

Name _____

Affiliation _____

Address _____

Phone Number _____

See the instructions for filling out the Amphibian and Reptile Individual Observation Form for details on what information to provide.

SPECIES	DESCRIPTION	DATE & TIME	LOCALITY	HABITAT	REMARKS

Appendix F. Amphibian and reptile multiple observation data collected from road driving surveys and any other observations from roads that were made while driving to survey sites.

Species	Description	Date	Time	UTM	Northing	Easting	Elelvation	Habitat	Remarks
PICA	1 m, adult	1-Jun-00	14:00	11	4687610	745864	1422	agriculture	Observation by M. McDonald
CRVI	91.4 cm, adult	2-Jun-00	-	11	4687784	746147	1400	ag/ sagebrush steppe interface	Observation by M. McDonald
PICA	61 cm, juvenile	8-Jun-00	15:20	11	4688992	746586	1398	ag/ sagebrush steppe interface	
PICA	53.3 cm, juvenile	8-Jun-00	15:30	11	4692232	743727	1374	sagebrush/ crested wheat dominated	dead on road
CRVI	15.2 cm, juvenile	10-Jun-00	19:10	11	4684541	741316	1677	lowland between sage/ crested wheat hillsides	very aggressive, had a black button on tail
COCO	30.5 cm, juvenile	13-Jun-00	15:00	11	4688148	746151	1411	ag/ sagebrush, crested wheat interface	Observation by R. Wilson; dead on road
PICA	25.4 cm, juvenile	20-Jun-00	17:00	11	4696656	741346	1318	ag/ ag interface	Observation by R. Wilson; dead on road
CRVI	61 cm, adult	14-Jun-00	11:00	11	4687687	746436	1400	agriculture, near round corral at BCWMA	Observation by R. Wilson; killed by worker
PICA	61 cm, juvenile	14-Jun-00	-	11	4687782	746726	1399	ag/ crested wheat dominated interface	
PICA	30.5 cm, juvenile	18-Jun-00	-	11	4687240	256995	1349	sagebrush, cheatgrass, crested wheat dominated	very aggressive
SCOC	adult male	22-Jun-00	19:20	11	4684874	742572	1593	sage stepp next to a riparian area	sitting on a boulder near roadside
PICA	45.7 cm, juvenile	23-Jun-00	10:38	11	4684537	741439	1667	sagebrush, cheatgrass/ riparian interface	very docile and slow
MATA	91.4 cm, adult	27-Jun-00	19:20	11	4687701	745567	1426	riparian/ sagebrush, cheatgrass, crested wheat interface	dead on road
PICA	76.2 cm, adult	28-Jun-00	11:20	11	4684689	741961	1637	interface between sage steppe uplands	dead on road
PICA	22.9 cm, juvenile	28-Jun-00	18:10	11	4687783	746553	1389	ag/ ag interface near BCWMA	dead on road
CRVI	30.5 cm, juvenile	28-Jun-00	19:15	12	4687776	253566	1377	ag/ sagebrush, crested wheat interface	dead on road, missing head and rattle
THEL	45.7 cm, juvenile	29-Jun-00	9:20	11	4675937	740650	2143	Aspen forest/ sage steppe upland interface	dead on road
PICA	30.5 cm, juvenile	29-Jun-00	20:24	12	4686221	254806	1368	sagebrush, cheatgrass, crested wheat interface	very aggressive, hissing and rattling tail
PICA	45.7 cm, juvenile	30-Jun-00	8:37	12	4683999	256414	1389	sagebrush, cheatgrass, crested wheat interface	dead on road
PICA	91.4 cm, reddish, adult	5-Jul-00	18:40	12	4687791	253064	1391	ag/ sagebrush, crested wheat, cheatgrass interface	very docile
PICA	61 cm, dark colored, juvenile	5-Jul-00	21:30	12	4687576	254593	1371	ag/ sagebrush, crested wheat, cheatgrass interface	very mellow, skin feels cold
UTST	juvenile female	6-Jul-00	11:50	11	4690889	712096	1481	upland sage steppe interface	tail was missing, reddish tint
PICA	76.2 cm, adult	7-Jul-00	9:22	12	4664535	257877	1484	juniper, sage steppe uplands interface	reddish in color
SCGR	adult	7-Jul-00	11:53	12	4660338	258558	1537	burnt juniper woodland/ riparian interface	
SCGR	adult	7-Jul-00	12:05	12	4660357	258523	1545	burnt juniper woodland/ riparian interface	

Species	Description	Date	Time	UTM	Northing	Easting	Elelvation	Habitat	Remarks
SCGR	adult	7-Jul-00	12:25	12	4660380	258440	1527	burnt juniper woodland/ riparian interface	
SCGR	adult	7-Jul-00	12:30	12	4660448	258358	1532	burnt juniper woodland/ riparian interface	
PICA	adult	2-Jul-00	8:45	12	4687271	254009	1375	sagebrush, cheatgrass, crested wheat interface	quickly took refuge in a burrow
PICA	61 cm, juvenile	19-Jul-00	8:45	12	4682573	257358	1386	sagebrush, cheatgrass, crested wheat interface	dead on road, thin bodied
PICA	1.06 m, adult	19-Jul-00	14:15	11	4697175	711637	1331	sage steppe/ riparian interface	dead on road
SCGR	adult female	21-Jul-00	10:38	12	4662936	277822	1905	pinyon pine, mahogany, sagebrush/ granite interface	brown background color
SCGR	adult	4-Aug-00	10:16	12	4686577	300475	1511	sagebrush, crested wheat interface	
SCGR	adult	4-Aug-00	10:33	12	4685738	300143	1530	sagebrush, crested wheat interface	distinct dark brown coloring
SCGR	adult	4-Aug-00	10:47	12	4684243	299712	1467	sagebrush, crested wheat interface	distinct dark brown coloring
CNTI	adult	4-Aug-00	10:58	12	4683730	299558	1440	sagebrush, crested wheat interface	very fast, active

Appendix G. The dates, times spent surveying, genral route descriptions, and the corresponding results from road driving surveys.

Date	Time	Route	Results
8-Jun-00	17:00-19:30	Up Big Cedar Canyon, across to Dry Creek down, and back to the BCWMA on Mountain Rd.	No Observations
10-Jun-00	21:30-23:00	Mountain Rd. to Goose Creek Rd., turned around at the Austin Ranch entrance and back on same route	1 Western Rattlesnake juvenile
21-Jun-00	20:30-22:30	Up Big Cedar Canyon, across to Buckhorn Canyon, down and back to the BCWMA on Mountain Rd.	No Observations
23-Jun-00	8:30-11:00	Up and down Buckhorn Canyon and Big Cedar Canyon via Mountain Rd. to and from the BCWMA	1 Gopher Snake juvenile
28-Jun-00	9:00-12:30	Up and down Little Cedar Canyon, Robber Gulch, and Buckhorn Canyon via Mountain Rd.	1 Gopher Snake adult
29-Jun-00	20:00-22:00	Mountain Rd. to Goose Creek Rd., turned around at the Idaho/Utah border and back on same route	1 Gopher Snake juvenile
30-Jun-00	19:00-20:30	Up and down Buckhorn Canyon via Mountain Rd. to and from the BCWMA	No Observations
6-Jul-00	20:00-21:30	Mountain Rd. to Birch Creek Rd., turned around at the junction to the City of Rocks National Reserve and back on same route	No Observations
18-Jul-00	19:00-21:00	Mountain Rd. to Birch Creek Rd., through the City of Rocks National Reserve, and back on same route	No Observations
1-Aug-00	19:15-20:45	Up Big Cedar Canyon, across to Buckhorn Canyon, down and back to the BCWMA on Mountain Rd.	No Observations
3-Aug-00	18:30-19:30	Up Big Cedar Canyon, turned around at the junction with Buckhorn Canyon, and back on same route	No Observations

Appendix H. The dates, locations (UTM), number of aquatic funnel traps, trap nights, and the corresponding results from aquatic funnel trapping surveys.

Date	Locality	Northing	Easting	# of Traps	# of Nights	Results
6-Jul-00	Spring below Curtis Reservoir	4689976	712679	4	2	1 Pacific Treefrog tadpole
19-Jul-00	Ponded Stream (Cooper Property)	4697174	711215	5	2	No Observations
19-Jul-00	North Cottonwood Creek Resevoir	4698435	711958	8	2	No Observations
20-Jul-00	Pond on SE Corner of City of Rocks	4661746	278965	4	2	1 Western Terrestrial Garter Snake juvenile

Appendix I. The locations, dates, start and end points, and the estimated widths of all survey sites sampled in this study.

Locality	Date	Time	Start Location	Farthest Location Away	Approximate Width of Area Surveyed
Big Cottonwood Canyon	11-Jun-00	12:00-19:00	Trailhead	4680486, 741461	surveyed along trail (5 m) scouting potential survey sites
Big Cottonwood Canyon	19-Jun-00	9:45-12:40	4684143, 743813	surveyed to rocky face at top on the west side	surveyed about 70 meters wide
Buckhorn Canyon	20-Jun-00	10:10-10:35	4689909, 736750	about 60 meters up talus slope on northwest side	surveyed about 40 meters wide
Buckhorn Canyon	20-Jun-00	10:40-12:00	4689966, 738194	followed ridge up talus slope for 50 meters	surveyed about 40 meters wide
Buckhorn Canyon	20-Jun-00	15:00-15:45	4690183, 738450	followed ridge up past exposed rocks	surveyed about 50 meters wide
Robber Gulch	20-Jun-00	16:30-17:50	4690387, 739768	surveyed to top of hill on northern side	surveyed about 100 meters wide
Little Cedar Canyon	21-Jun-00	9:30-12:30	4688907, 743892	surveyed to top of hill on northern side	surveyed about 250 meters wide
Little Cedar Canyon	21-Jun-00	15:30-18:00	4688779, 743844	surveyed hillside on southern side up 60 meters	surveyed about 100 meters wide
Big Cedar Canyon	22-Jun-00	9:00-10:15	4687360, 744170	surveyed to top of exposed rocks on northern side	surveyed about 150 meters wide
Big Cedar Canyon	22-Jun-00	10:20-10:50	4687288, 744081	surveyed up to fenceline on southern side	surveyed about 50 meters wide
Big Cedar Canyon	22-Jun-00	10:55-12:10	4687027, 743610	surveyed uphill on northern side about 100 meters	surveyed about 100 meters wide
Big Cedar Canyon	22-Jun-00	16:30-19:30	4684574, 742280	followed stream to the north for 200 meters	surveyed about 25 meters wide
Cave Canyon Trail	27-Jun-00	10:00-10:45	4683244, 741115	4683307, 741076	suveyed about 70 meters wide
Cave Canyon Trail	27-Jun-00	11:00-11:20	4683033, 740900	4683074, 740848	surveyed about 30 meters wide
Big Cottonwood Canyon	27-Jun-00	16:45-17:30	4681188, 742652	surveyed up hillside for about 30 meters	surveyed about 90 meters wide
Big Cottonwood Canyon	27-Jun-00	17:35-18:30	4680650, 742065	surveyed up eastern talus slope for about 60 meters	surveyed about 200 meters wide
Bosteter Road (exposed rocky area and riparian)	28-Jun-00	9:45-10:30	4676192, 740299	4676009, 740173	surveyed about 25 meters wide
Big Cottonwood Canyon	28-Jun-00	12:00-13:20	4680004, 742079	surveyed entire wetland	surveyed entire wetland

Locality	Date	Time	Start Location	Farthest Location Away	Approximate Width of Area Surveyed
South End of Goose Creek Reservoir	30-Jun-00	9:30-12:30	4668371, 257508	4668427, 258497	surveyed about 150 meters wide
Austin Ranch	1-Jul-00	12:15-12:45	4663805, 256630	4663853, 256515	surveyed about 30 meters wide
South End of Goose Creek Reservoir	2-Jul-00	9:30-12:45	4668371, 257508	4668427, 258497	surveyed about 200 meters wide
Austin Ranch	5-Jul-00	10:05-12:15	4663805, 256630	4663853, 256515	surveyed about 50 meters wide
Austin Ranch (Canal)	5-Jul-00	12:20-15:20	4663820, 256713	4663057, 257091	surveyed 3 meters from shoreline on both sides
Austin Ranch (wetland west of canal)	5-Jul-00	15:20-16:15	4663796, 256685	surveyed entire wetland	surveyed entire wetland
Curtis Reservoir	6-Jul-00	12:35-11:15	4688082, 713792	surveyed where water had been before dryng up	surveyed where water had been before dryng up
Spring Below Curtis Reservoir	6-Jul-00	13:40-14:15	4689976, 712679	surveyed entire wetland	surveyed entire wetland
Sagehen Springs	6-Jul-00	14:25-15:05	4693963, 715123	surveyed entire wetland	surveyed entire wetland
Spring Near Fencline Below Sagehen Springs	6-Jul-00	16:00-16:20	4689563, 715104	surveyed entire wetland	surveyed entire wetland
Emery Creek	7-Jul-00	9:55-10:40	4661525, 260352	surveyed entire rock outcrop	surveyed about 20 meters wide
Emery Creek (riparian)	7-Jul-00	11:00-11:50	4660567, 258191	4660324, 258598	surveyed 3 meters from shoreline on both sides
Austin Ranch (wetlands east of canal)	7-Jul-00	13:20-14:55	4663762, 256745	4663474, 256692	surveyed all associated wetlands east of canal
Austin Ranch (wetlands east of canal)	7-Jul-00	15:00-15:35	4663474, 256692	surveyed entire wetland area	surveyed entire wetland area
Cooper Property (Spring)	18-Jul-00	15:19-16:10	4697174, 711215	surveyed entire ponded portion of the stream	surveyed entire ponded portion of the stream
North Cottonwood Creek Reservoir	18-Jul-00	16:15-17:26	4698227, 711878	surveyed around the perimeter of the reservoir	surveyed around the perimeter of the reservoir
North Cottonwood Creek Reservoir	19-Jul-00	11:50-14:22	4698435, 711958	surveyed around the perimeter of the reservoir	surveyed around the perimeter of the reservoir
Pond Near Lower SE of City of Rocks	20-Jul-00	9:50-11:07	4661746, 278965	surveyed entire wetland	surveyed entire wetland
Twin Sisters (City of Rocks)	20-Jul-00	11:30-1:00	4658030, 275030	surveyed around rocky peaks	surveyed about 50 meters wide
Twin Sisters (City of Rocks)	21-Jul-00	9:15-10:25	4658030, 275031	surveyed around rocky peaks	surveyed about 70 meters wide
Circle Creek Overlook (City of Rocks)	21-Jul-00	10:35-12:35	4662942, 277653	4663465, 277805	surveyed about 30 meters wide
Circle Creek Trail (Loop)	22-Jul-00	8:20-13:15	4662942, 277653	surveyed the north fork up to Indian Groves	surveyed east to Bread Loaves and finished near Stripe Rock

Locality	Date	Time	Start Location	Farthest Location Away	Approximate Width of Area Surveyed
Minidoka National Wildlife Refuge	25-Jul-00	16:15-19:41	4725298, 300716	surveyed perimeter of cove and shoreline	surveyed perimeter of cove and shoreline
Minidoka National Wildlife Refuge	26-Jul-00	10:30-16:12	4725423, 299677	surveyed perimeter of cove and shoreline	surveyed perimeter of cove and shoreline
Minidoka National Wildlife Refuge (Bobcat Canyon)	27-Jul-00	9:30-13:00	4721304, 302737	4721451, 312079	surveyed primarily the exposed rock cliffs on the northern side
Minidoka National Wildlife Refuge	27-Jul-00	13:09-14:47	4720957, 312735	surveyed perimeter of cove and shoreline	surveyed perimeter of cove and shoreline
Minidoka National Wildlife Refuge (desert)	28-Jul-00	9:20-11:50	4727914, 296565	surveyed rocky desert for about 100 meters length	surveyed about 70 meters wide
Minidoka National Wildlife Refuge (wetland)	28-Jul-00	12:27-13:10	4727785, 297230	surveyed entire wadable porion of the wetland	surveyed entire wadable porion of the wetland
Raft River (BLM exclosure)	1-Aug-00	12:20-15:22	4659716, 297380	4660306, 297793	surveyed about 10 meters from shoreline on both sides
Independence Lakes (1)	2-Aug-00	12:31-13:28	4675326, 280442	surveyed perimeter and shallows of lake	surveyed perimeter and shallows of lake
Independence Lakes (2)	2-Aug-00	13:34-14:22	4675180, 279855	surveyed perimeter and shallows of lake	surveyed perimeter and shallows of lake
Independence Lakes (3)	2-Aug-00	14:30-15:23	4674710, 279675	surveyed perimeter and shallows of lake	surveyed perimeter and shallows of lake
Independence Lakes (4)	2-Aug-00	15:31-16:20	4674485, 279664	surveyed perimeter and shallows of lake	surveyed perimeter and shallows of lake
Sublett Reservoir	3-Aug-00	11:25-13:24	4687878, 331703	surveyed northern shallow portion of the reservoir	surveyed northern shallow portion of the reservoir
Sublett Reservoir	3-Aug-00	13:30-14:10	4689440, 331656	4689249, 331614	surveyed 8 meters from shoreline on both sides and associated wet meadows
McClendon Springs	4-Aug-00	9:00-10:20	4689674, 301752	surveyed perimeter of wetland	surveyed perimeter of wetland