

**Supplemental File S2:** Raw data used to model Wright fishhook cactus detection rates and counts. Columns are defined as follows: Site: Name of macro-plot; Altitude: Height in meters at which the drone survey was conducted; SC\_1: The number of size class 1 individuals that were confirmed in the macro-plot; SC\_2: The number of size class 2 individuals that were confirmed in the macro-plot; SC\_3: The number of size class 3 individuals that were confirmed in the macro-plot; Total: The total number of cacti that were confirmed in the macro-plot; A\_SC1: The actual number of size class 1 cacti that were present in the macro-plot ground census; A\_SC2: The actual number of size class 2 cacti that were present in the macro-plot ground census; A\_SC3: The actual number of size class 3 cacti that were present in the macro-plot ground census; A\_Total: The total number of cacti that were found in the macro-plot during the ground census; P\_SC1: The percent of size class 1 individuals that were confirmed ( $SC_1/A\_SC1$ ); P\_SC2: The percent of size class 2 individuals that were confirmed ( $SC_2/A\_SC2$ ); P\_SC3: The percent of size class 3 individuals that were confirmed ( $SC_3/A\_SC3$ ); P\_Total: The percent of Wright fishhook cacti that were confirmed ( $Total/A\_Total$ ).

Site	Altitude	SC_1	SC_2	SC_3	Total	A_SC1	A_SC2	A_SC3	A_Total	P_SC1	P_SC2	P_SC3	P_Total
North Dry Valley F	10	0	1	2	3	1	1	5	7	0	1	0.4	0.428571
North Dry Valley U	10	2	2	7	11	2	2	7	11	1	1	1	1
SCWR 18D F	10	6	11	0	17	31	16	4	51	0.193548	0.6875	0	0.333333
SCWR 18D U	10	6	11	4	21	29	19	8	56	0.206897	0.578947	0.5	0.375
SCWR 24 F	10	2	1	20	23	33	26	36	95	0.060606	0.038462	0.555556	0.242105
SCWR 24 U	10	0	6	38	44	31	14	43	88	0	0.428571	0.883721	0.5
SCWR 24A F	10	0	0	7	7	9	1	7	17	0	0	1	0.411765
SCWR 24A U	10	0	3	8	11	2	3	8	13	0	1	1	0.846154
SCWR 26 F	10	1	3	10	14	12	14	14	40	0.083333	0.214286	0.714286	0.35
SCWR 26 U	10	1	2	8	11	5	7	14	26	0.2	0.285714	0.571429	0.423077
SCWR 2B F	10	0	4	4	8	1	5	6	12	0	0.8	0.666667	0.666667
SCWR 2B U	10	0	1	3	4	3	4	5	12	0	0.25	0.6	0.333333
Upper Coal Mine U	10	0	0	2	2	0	0	2	2	0	0	1	1
Willow Seep Rd F	10	0	3	2	5	8	30	12	50	0	0.1	0.166667	0.1
North Dry Valley F	15	0	1	2	3	1	1	5	7	0	1	0.4	0.428571
North Dry Valley U	15	0	2	2	4	2	2	7	11	0	1	0.285714	0.363636
SCWR 18D F	15	1	2	0	3	31	16	4	51	0.032258	0.125	0	0.058824
SCWR 18D U	15	3	4	3	10	29	19	8	56	0.103448	0.210526	0.375	0.178571
SCWR 24 F	15	1	0	10	11	33	26	36	95	0.030303	0	0.277778	0.115789
SCWR 24 U	15	0	0	22	22	31	14	43	88	0	0	0.511628	0.25

SCWR 24A F	15	0	0	4	4	9	1	7	17	0	0	0.571429	0.235294
SCWR 24A U	15	0	1	7	8	2	3	8	13	0	0.333333	0.875	0.615385
SCWR 26 F	15	0	1	2	3	12	14	14	40	0	0.071429	0.142857	0.075
SCWR 26 U	15	0	0	6	6	5	7	14	26	0	0	0.428571	0.230769
SCWR 2B F	15	0	2	4	6	1	5	6	12	0	0.4	0.666667	0.5
SCWR 2B U	15	0	2	2	4	3	4	5	12	0	0.5	0.4	0.333333
Upper Coal Mine U	15	0	0	2	2	0	0	2	2	0	0	1	1
Willow Seep Rd F	15	0	1	2	3	8	30	12	50	0	0.033333	0.166667	0.06
North Dry Valley F	20	0	0	1	1	1	1	5	7	0	0	0.2	0.142857
North Dry Valley U	20	0	0	2	2	2	2	7	11	0	0	0.285714	0.181818
SCWR 18D F	20	1	1	0	2	31	16	4	51	0.032258	0.0625	0	0.039216
SCWR 18D U	20	0	2	3	5	29	19	8	56	0	0.105263	0.375	0.089286
SCWR 24 F	20	0	0	6	6	33	26	36	95	0	0	0.166667	0.063158
SCWR 24 U	20	0	0	12	12	31	14	43	88	0	0	0.27907	0.136364
SCWR 24A F	20	0	0	3	3	9	1	7	17	0	0	0.428571	0.176471
SCWR 24A U	20	0	0	4	4	2	3	8	13	0	0	0.5	0.307692
SCWR 26 F	20	0	0	1	1	12	14	14	40	0	0	0.071429	0.025
SCWR 26 U	20	1	0	2	3	5	7	14	26	0.2	0	0.142857	0.115385
SCWR 2B F	20	0	0	3	3	1	5	6	12	0	0	0.5	0.25
SCWR 2B U	20	0	0	2	2	3	4	5	12	0	0	0.4	0.166667
Upper Coal Mine U	20	0	0	1	1	0	0	2	2	0	0	0.5	0.5
Willow Seep Rd F	20	0	0	1	1	8	30	12	50	0	0	0.083333	0.02