Change in size and crown area of buttebrush, big sagebrush, bloomer rabbitbrush and pine — Jul 10 1963 Hormay

	Year	No of plants	Diam whole plant	Diam Live area	Height whole plant	Height Live crown	Crown area on plot: Live	Dead (Ruler measurements and estimates)	Whole crown	Whole crown per plant	% live crown	% dd crown	
Butterbrush inside exclosure													
1 ✓ Dead plants at time of fencing	1933	14	30.9	0	32.2	0	0	10,489	10 489	749	0	100	Based on 1961 survey. Some growth since
2 Live plants " " "	1933	762	19.6		16 approx		175 104	—	230 400	302	76	24	Based on old dead crown 1952 intercept
3 Live 1933 plants in	1952	762	35.6	—			491 473	266 152	757 625	994	64.9	35.1	obtained by subtracting 4 from 5
4 ✓ Reproduction in	1952	179	4.8	—	7.7	approx same as 30±	3 114	164	3 278	18	95.0	5.0	← approximations
5 1952 line intercept (adjusted)	1952	941	32.1	less than 32			494 587	766 316	760 903	809	65.0	35.0	
6 Live 1933 plants in	1961	762	32.4		33.7	20.0	242 228	417 660	630 438	827	33.8	66.2	
7 ✓ Reprod (1933-1960) in	1961	138	7.7	—	8.6	same	4674	253	4927	35.7	94.9	5.1	
8 ✓ 1961 Survey	1961	900	30.0	—	33.5		247 452	417 913	635 365	706	34.2	65.8	
9 Plant alive in 1933 and pruned 1963 in	1961	100	43.6		28.0		59 473	89 639	149 112	1491	39.9	60.1	
10 Plants alive in 1933 and not treated. in (6 minus 9)	1961	662	30.4		35.5		153 305	328 021	481 326	727	31.9	68.1	
11 Plants removed in 1963 (3 series)	1963	36											
12 Plants alive in 1933 and not treated	1963	626											
6		762					97 913						ok.
7		138					4 674						wire drama measurements.
8		900					102 587						

Butterbrush outside exclosure													
1 ✓ Dead plants at fencing	1933	18	15.2	0	11.8	0	0	3278	3278	182	0	100	Based on 1961 survey
2 Live plants at fencing	1933	642	19.6		16 approx		147352		193884	302	(assumed)		
3 Live 1933 plants in	1952	600					142 043	44966	187 009	312	75.9	24	
4 ✓ Reproduction to 1952	1952	42	3.4		3.0	assumption	370	6	376	9	98.4	2	← Estimated
5 1952 line intercept adjusted	1952	642	19.3				142 413	44 972	187 385	292	76.0	24	
6 Live 1933 plants in	1961	642	18.7		16.2	same	71 905	105 190	177 095	276	40.6	59.4	
7 ✓ Reproduction through 1960	1961	54	3.7		3.0	same	560	10	570	106	98.7	1.8	From 1960 survey - sample est.
8 ✓ 1961 Survey	1961	696	17.5		15.7	15.7	72 465	105 200	177 665	255	40.8	59.2	
9 Capped plants (1961)	1961	28											
10 Plants alive '33 and not treated	1961	668											
11 Capped plants (1963)	1963	28											
12 Plants alive '33 and not treated	1963	640											
6		642					51 594						
7		54					560						
8		696					52 154						

1/ Calculated on basis whole crown area and number of plants. No of plants based on 1961 survey 814 plus 100 pruned. Minus removal & dead

2/ Assumed proportion of live crown about the same inside and outside exclosure; that the size of plants outside did not change appreciably from 1933 to 1952; that the proportion of dead inside was 24 percent I.e. - the amount measure outside in 1952

Change in size and crown area of big sagebrush rabbitbrush and pine

July 10/63
Hormay

	Year	No of plants	Diam whole plant	Height	Crown area on plot Live	Live Per plant	Dead	Dead Per plant	Whole crown	Size of plant Per plant	% live crown	% dd crown
Big sagebrush inside exclosure				Not measured								
	1957				275 006		101, 715		376, 721		73	27
	1961	1084	27.3		219 217		204 795		424 012	391	52	48
" " outside exclosure (check plot)												
	1957				152 574		48 181		200 755		76	24
	1961	578	20.7		88, 939		105, 053		193, 992	336	46	54
Bloomer rabbitbrush inside exclosure												
	1957				18, 434		5821		24, 255	-	76	24
	1961	292	10.2		20, 876		3 090		23, 966	82	87	13
" " outside exclosure												
	1957				16, 534		7428		23, 962		69	31
	1961	252	9.8		16, 510		2273		18, 783	75	88	12
Pine inside exclosure												
	1957											
	1961											
" " outside exclosure												
	1957											
	1961											