

# Browns Well

## Staked plants (rodent caches)

Mortality and survival of Bitterbrush seedlings  
growing from seed  
cached by rodents

1941  
A. Horman

Near Browns Well Modoc NF

Cache + Stake No.	ALH	ALH	ALH	No seedlings in		Remarks
	June 1941	FD Oct 1941	DE Oct 1941	May 13 1943	Nov 13 1943	
1	3	2	1	1	1	
2	4	3	3	0	0	
3	9	7	5	2	2	
4 West	14	6	5	1	1	
5	6	6	6	5	1	
6	5	4	4	2	0	
7	13 + 1 pine	9 + 1 pine	2	2	1	
8	10	9	4	4	2	X
9	13	2	1	1	0	
10	4	4	4	3	2	
11	5	3	3	2	1	
12	17	12	7	2	0	
13	16	16	12	11	11	
14	14	12	12	11	11	X
15	10	9	5	5	1	X
16	3	3	3	2	2	
17	29	5	3	3	2	
18	5	4	3	2	1	
19	5	4	4	4	1	
20	11	11	11	4	2	
21	13	12	12	9	8	X
22	45	30	30	29	22	X
23	14	14	11	11	11	
24	7	5	5	3	2	
25	12	4	4	2	2	
26	3	3	3	3	3	
27	2	1	1	1	0	
28	3	3	0	0	0	
29	13	2	2	0	0	
30	3	1	1	0	0	

Notes. Marking stakes set about 6" West of seedlings. - Seedlings are east of stakes. All seedlings germinated in spring of 1941

# Browns Well - MadocNF

State	ALH	ALH	ALH	No of seedlings in cache		
	June	F.D. Oct	AF May	ALH Oct	may Nov	
No	22	13	12	4	130	1943
	1941	1941	1942	1942	1943	
31	3	1	1	0	0	0
32	5	5	5	1	0	0
33	16	13	11	0	0	0
34	3	1	0	0	0	0
35	3	2	2	0	0	0
36	12	3	2	0	0	0
37	9	5	0	0	0	0
38	24	21	15	0	0	0
39	20	18	5	1	1	0
40	6	1	1	0	0	0
41	4	4	2	1	0	0
42	8	7	7	7	6	6
43	6	4	0	0	0	0
44	2	2	2	2	2	1
45	2	2	1	1	1	1
46	9	8	6	3	1	1
47	4	4	3	3	3	3
48	2	1	0	0	0	0
49	9	9	9	9	7	7
50	5	5	5	3	3	3
51	13	13	12	10	5	5
52	9	5	4	4	4	4
53	11	10	10	9	6	6
54	24	15	15	13	11	10
55	5	5	5	5	5	5
56	2	2	2	2	0	0
57	14	11	10	9	6	6
58	26	13	13	12	11	11
59	26	23	21	17	16	15
60	26	25	23	22	18	18
61	14	10	10	3	2	2
62	7	1	1	1	1	1
63	15	14	14	12	7	7

Stk	June	Oct	May	ALH	May	
No	yr	13 1941	14 1942	4 1942	13 1943	
64	7	6	2	2	2	2
65	11	10	10	10	10	10
66	6	6	5	5	2	2
67	16	16	12	1	0	0
68	13	12	7	7	4	4
69	7	6	5	5	2	2
70	6	5	5	5	5	5
71	11	9	10	10	8	8
72	23	21	24	12	2	2
73	10	10	10	7	3	3
74	2	2	2	2	2	2
75	6	2	1	0	0	0
76	19	19	15	14	14	14
77	10	9	9	9	9	9
78	6	1	1	1	1	1
79	6	5	5	5	5	5
80	11	9	9	6	6	6
81	<small>in arrow 1st May</small> 7	7	2	2	0	0
82	8	8	8	6	5	5
83	12	8	8	6	5	5
84	5	5	3	1	1	1
85	7	6	3	1	1	1
86	2	1	1	0	0	0
87	18	17	17	13	6	6
88	7	4	3	1	1	1
89	4	3	3	X <sup>2</sup>	2	2
90	19	14	11	9	8	8
91	10	10	9	2	1	1
92	2	2	2	2	2	2
93	6	6	4	1	0	0

Stk No	1941		1942		1943	
	June 22	Oct 13	May 12 1942	Oct 4 1942	May 13 <sup>st</sup> 1943	
94	2	1	1	1	1	1
95	5	4	4	1	0	0
96	12	7	4	2	2	2
97	11	8	6	5	5	5
98	17	15	1	0	0	0
99	11 + 1 pine	8	6 - 1 pine	6 ← pine dead	3	3
100	7	7	7	7	6	6

Mortality

Cakes

Seedlings

To

-	-	5	17	27	28
93.6	72.6	60.8	44.4	33.5	32.6
100	77.5	65.2	47.5	35.9	34.8
	22		52	64	

First year  
No per cache 0

No  
caches

Change to survival

Mortality

Av.

1

2 IIII

3 IIII

4 IIII

5 IIII

6 IIII

7 IIII

8 II

9 IIII

10 IIII

11 IIII II

12 IIII

13 IIII

14 IIII

15 I

16 IIII

17 IIII

18 I

19 IIII

20 I

21

22

23

24 IIII

25

26 IIII

27

28 I

29 I

!

!

45 I

9

8

5

9

9

8

2

5

5

7

4

6

5

1

3

2

1

2

1

2

1

2

1

2

1

2

3

1

3

1

1

1

1

1

1

1

1

1, 0, 0, 1, 0, 0, 1, 0, 1

1, 0, 0, 0, 3, 2, 2, 1,

1, 0, 1, 0, 0,

1, 2, 1, 1, 0, 0, 0, 0, 1,

0, 5, 2, 0, 1, 4, 5, 1, 0,

6, 1, 5, 0, 1, 2, 0

1, 0

2, 4, 1, 0, 4,

1, 1, 0, 1, 0

0, 1, 1, 2, 2, 3, 3

8, 9, 5, 4

4, 2, 1, 0, 1, 1,

8, 4, 0, 3, 4,

3

0, 3, 0

5, 2

3

0, 5

2,

3, 10

14, 3, 1

7

24,

15,

# of caches of 0  
 # of caches of 1  
 # of caches of 2  
 # of caches of 3  
 # of caches of 4  
 # of caches of 5  
 # of caches of 6  
 # of caches of 7  
 # of caches of 8  
 # of caches of 9

1.4

10

1.4

.7

2.0

1.6

0.5

= 2.2

0.6

1.7

6.5

4.8

= 3.8

3.0

= 1.0

3.5

3.0

7.5

2.0

6.5

6.0

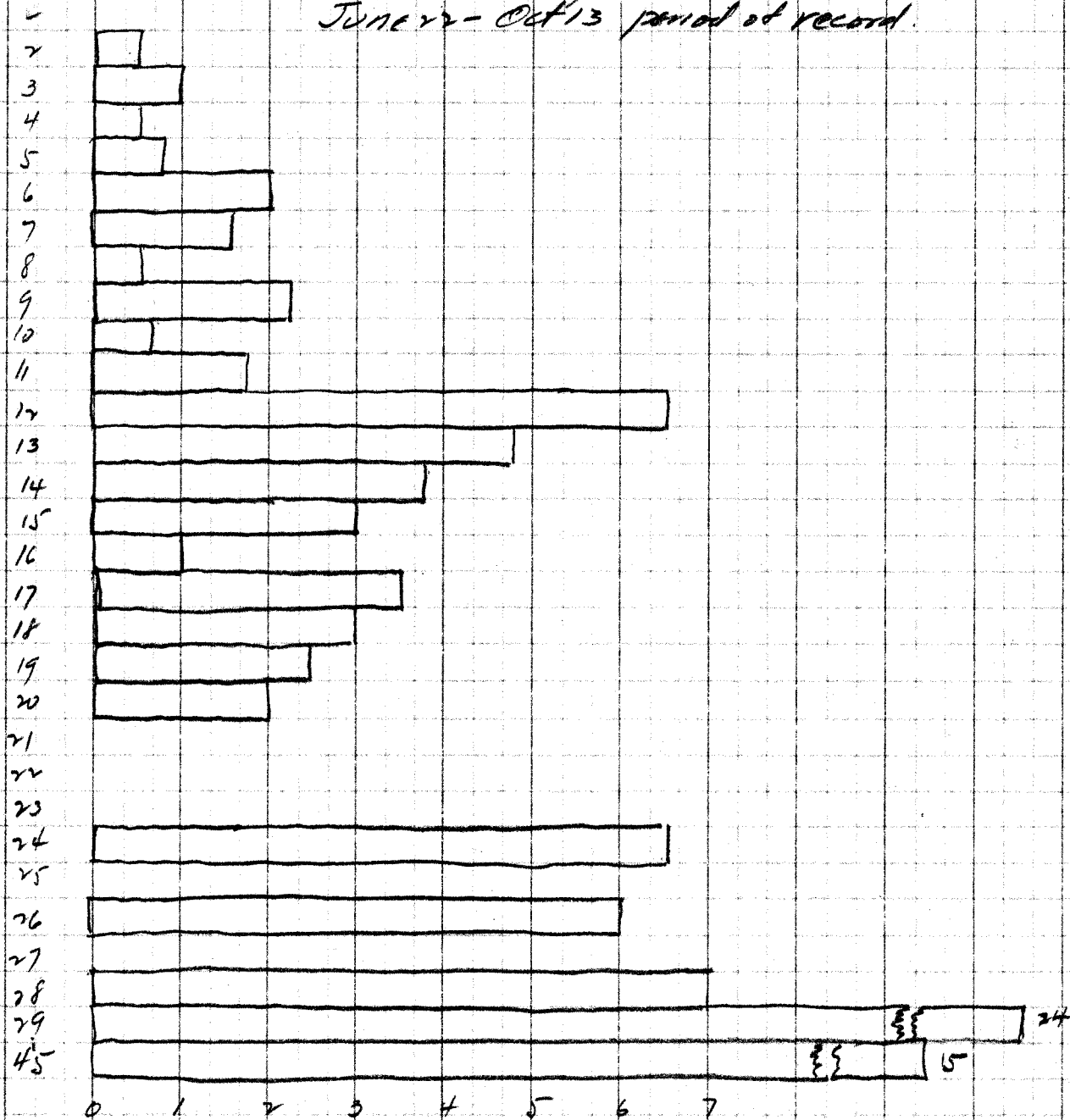
7.0

24.0

15.0

Mortality Pt  
 Seedlings during  
 first season of growth  
 June 22 - Oct 13 period of record.

No seedlings per core



No seedlings died during summer