

	A	B	C
1	DATE	SPECIES	SITE
2			
3			
4		<u>Jul-90</u> Polemonium vanbruntiae	
5			
6			
7			
8		Jun-91 Anemone multifida	
9			
10			
11		Oct-91 Helianthus strumosus	
12			
13		Mar-93 Helianthemum	
14		bicknellii	
15			
16		Apr-93 Helianthus strumosus	
17			
18		Aug-93 Helianthemum	
19		bicknellii	
20		Oryzopsis pungens	
21			
22			
23		Jul-94 Calystegia spithamea	
24			
25		Jul-96 Lathyrus maritimus	
26			
27		Oct-96 Helianthemum	
28		bicknellii	
29			
30		Oct-97 Platanthera flava	
31			
32		Mimulus moschatus	
33			
34		Sep-98 Cyperus houghtonii	
35			
36		Nov-98 Scirpus polyphyllus	
37			
38		Jun-00 Lactuca hirsuta	
39			
40			
41		Scirpus polyphyllus	
42			
43		Aug-00 Juncus torreyi	
44			
45			
46			
47		Mar-02 Scirpus polyphyllus	
48			
49		Aug-02 Helianthemum	
50		bicknellii	
51			
52		Aug-03 Juncus torreyi	
53			
54			
55		Sep-03 Cyperus houghtonii	
56			
57		Apr-04 Sanguisorba canadensis	
58			

	A	B	C
59		May-04 Geum laciniatum	
60			
61		Jul-04 Juncus greenei	
62			
63		Fall-04 Sanguisorba canadensis	
64			
65		Jul-05 C bigelowii, E.nigrum, H.appalachianum, J.trifidum, V.boreale, V.uliginosum	
66			
67			
68			
69			
70		Oct-05 Corallorhiza	
71		odontorhiza	
72			
73		May-06 Lathyrus maritimus	
74			
75		Sep-07 Juncus marginatus	
76			
77		Gentianopsis crinita	
78			
79		Fall-07 Polemonium vanbruntiae	
80			
81		Oct-07 Juncus torreyi	
82			
83		Fall-07 Polemonium vanbruntiaeGMNF	
84			
85		May-08 Taenidia integerrima	
86			
87		Sum 08 Geum laciniatum	
88			
89		Hypericum gentianoides	
90		Muehlenbergia uniflora	
91			
92		Sep-08 Carex muehlenbergii	
93		Carex brevior	
94			
95		Sep-08 Carex merrit-fernaldii	
96			
97		Nov-09 Juncus greenei	
98			
99		May-10 Lathyrus maritimus	
100			
101		Jul-10 Helianthus strumosus	
102		Carex brevior	
103			
104			
105		SUMMARY:	
106	Approximately 41 transplantions have been attempted by VT Fish & Wildlife Dept and/or contractors or consultants since 1990. The results can be		
107		summarized as follows:	
108			
109		Successful: 4	
110			
111	Successful with ongoing Monitoring and Management to enhance habitat and/or address threats: 4		
112			
113	Partial Success but with 50% or more decline in the population: 7		
114			
115		Failure: No survival 11	

	A	B	C
116			
117	Uncertain: due to various reasons 4		
118		Lack of certainty as to initial number of plants moved (cryptic species)	
119		Inability to relocate transplants afterwards	
120		Inability to distinguish them from naturally occurring individuals	
121			
122	Unknown: due to a lack of followup monitoring, generally in the case of rare but unlisted species : 11.		
123			
124			
125	There were also 5 additional attempts to mitigate with collection and sewing of seed: All of these are unknown due to lack followup or monitoring		
126		yet to begin	
127			
128			

	D	E	F	G	H	I	J	K	L	M
1	CONDITIONS	MONITORING								
2		1st YR	2nd YR	3rd YR	4th YR	5th YR	6th YR	7th YR	8th YR	9th YR
3										
4	Plants from NEWFS transplanted									
5	Wet meadow - 42 plants	41		39					118	600+ramets in 07
6	Riparian forested - 42 plants	41		26						0 in 2005
7										
8	Seed collection & transplantation	Sporadic reports received								
9	of impacted plants onsite	Apparently some survival although declining possibly due to hot, dry summers								
10										
11	Transplant 27 stems onsite	3 stems	0	0	0	0				
12										
13	Transplant 150 stems to CJ (most	7 stems	8 stems	24 stems	10 stems	2 stems				
14	transplants were H.canadense	25 stems	69 stems	41 stems	9stems	33 stems	16 stems	19 stems	4 in 2008	
15										
16	Transplant 8 stems onsite. Mostly	2 stems	0	0	0	Brush piled	Violation			
17	wrong spp; too early to ID					on area	pursued			
18	Transplant 42 stems to Camp John	Monitored with & unseparable from Thibault plants								
19	son w/ Thibault plants									
20	Transplant 5 clumps to Camp	2 clumps	2 clumps	2 clumps	1 clump	1 clump				
21	Johnson	2 clumps	2 clumps	2 clumps	2 clumps	2 clumps in 08				
22										
23	Transplant 4 plants onsite	17 stems	26 stems	34 stems	10 stems	85 stems				
24		49 stems	67 stems	44 stems	78 stems	57 stems	56 stems	84 stems	86 in 2008	
25	Transplant 9 individuals to UVM	Present	Present	0	No Report	No Report				
26	natural area									
27	Transplant 2 individuals onsite	2 plants	0	0	0	0				
28		Non transplanted Helianthemum spp remain but have declined								
29										
30	Transplanted 565 stems on 23	53 stems	73 stems	9 stems	No Report	15 plants				
31	tussocks	on 10 tus	on 10 tus	on 5 tus		on 2 tus				
32	Transplanted 12 clumps	7 clumps	1 clump	?	?	?				
33										
34	Tranplanted 14 clumps onsite	0	0	0	0	0			1 in 2008	
35	Est.protected area w/ C.houghtonii	10 clumps	5 clumps	2 clumps	0	2 clumps			assumed	
36	Transplant 42 plants onsite	16 plants	22 plants	No Report	9 plants	14 plants			seeded in	
37										
38	Transplant 65 Lactuca sp rosettes	46 plants	99 plants	57 plants	No Report	No Report	Obs, no #s	0	3 fl inds	2 & many veg
39	Existing onsite seedbed	Few trans							Trees remvd	in 2009
40		plant surv								
41	Transplant 1 clumps onsite	0	0	No Report	No Report	No Report				
42										
43	Transplant ca 90 plants to	55 stems	0	10 stems	20 stems	0	No report	8 fl stems	0	0
44	Shelburne Farms									
45	Transplant 44 plants @ 2 locs onsite in 2002		44	No Report	50 stems	Doing well	100 fl stem	100 fl stem	88 fl stems	30 fl stems
46					Upper loc gone					
47	Transplant ca 100 clumps onsite	Absolved of all monitoring & mgt cond. Due to delisting								
48										
49	Transplant 17 plants onsite	No Report	14 plants	0	0	0	0			
50	& 100 Helianthemum sp seedlings									
51										
52	Transplant ca 150 plants to Hort	6 clumps	0	No Report	0	0	0	0	0	
53	Farm and									
54	Transplant ca 71 plants onsite in 07					2 plants	0	1		
55	Transplant 20 plants onsite	7 plants	0	4 plants	0 plants	82 plants				
56					500 after	200 nearby				
57	208 seeds planted along Deerfield	No followup monitoring, but no germination in tested seed								
58	R. @ 3 locations									

[illegible]

[illegible]

	N	O
1		CONCLUSION
2	10th YR	
3		
4		
5		Sucess
6		Failure
7		
8		Unknown (lack of monitoring
9		
10		
11		Failure
12		
13		Some survival but uncertain
14		Many stems H.can
15		
16		Failure
17		
18		Some survival but uncertain
19		Many stems H.can
20		Survived but de-
21		clined
22		
23		Success w/ yearly
24		monitoring & mgt
25		Failure
26		
27		Failure
28		
29		
30		Declined but plants
31		naturally move
32		Failure but many
33		new sites
34		Failure
35		
36		Trans declined but
37		pop'l increased onsite
38		Uncertain
39		how many plants
40		were already there
41		Failure
42		
43	1 but	Declined, but spread
44	17 nearby	onsite
45	49 fl stems	Success w/ mgt
46		1 loc failed
47		
48		
49		Failure, but good survival
50		elsewhere onsite
51		
52		Failure
53		
54		Declined but spread onsite
55		Success w/ management
56		
57		Unknown
58		

	N	O
59		Unknown
60		
61		Success w/ management
62		
63		Uncertain, unable to relocate
64		
65		Marginal: Survived but not spreading
66		
67		
68		
69		
70		Trans Failure; Persisting altho persisting on rest of site.
71		
72		
73		Ca. 50% survival
74		
75		Unknown
76		
77		
78		
79		Unknown
80		
81		Unknown
82		
83		Unknown
84		
85		Successful but too early
86		
87		
88		Unknown
89		Unknown
90		Unknown
91		
92		Uncertain?
93		
94		
95		Unknown
96		
97		Unknown
98		
99		Too Early to determine
100		
101		Too Early to determine
102		Unknown
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	N	O
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