

2001 - July - 2

MILFOIL STUDY FILE

HERIVORE ACTIVITY BY

DR BOB JOHNSON
CORNELL UNIV.

P.olt,

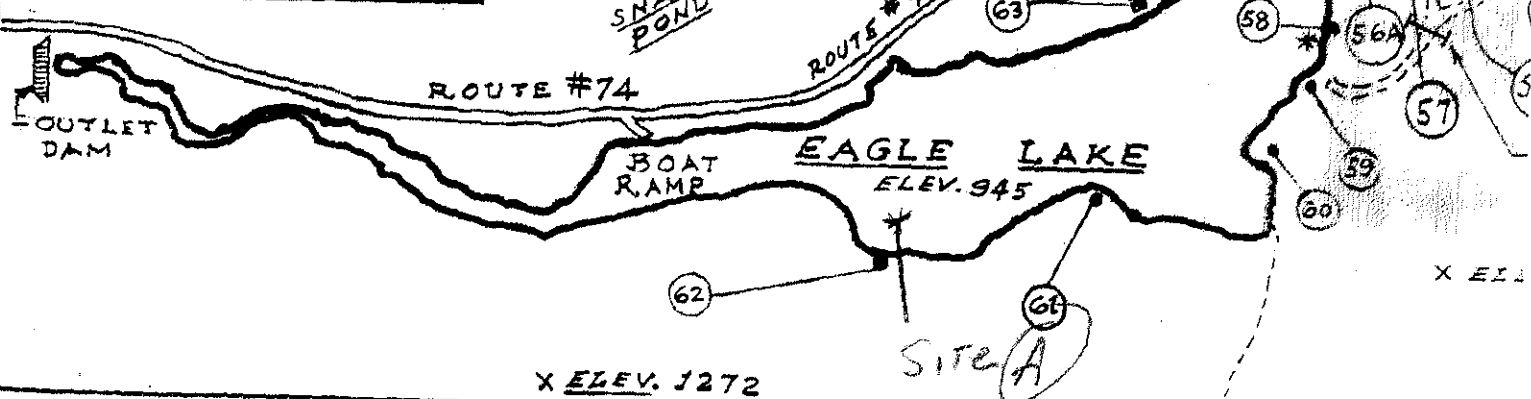
Attached are copies of microscope slides
and you may so you can tell what
we found where.

Thanks

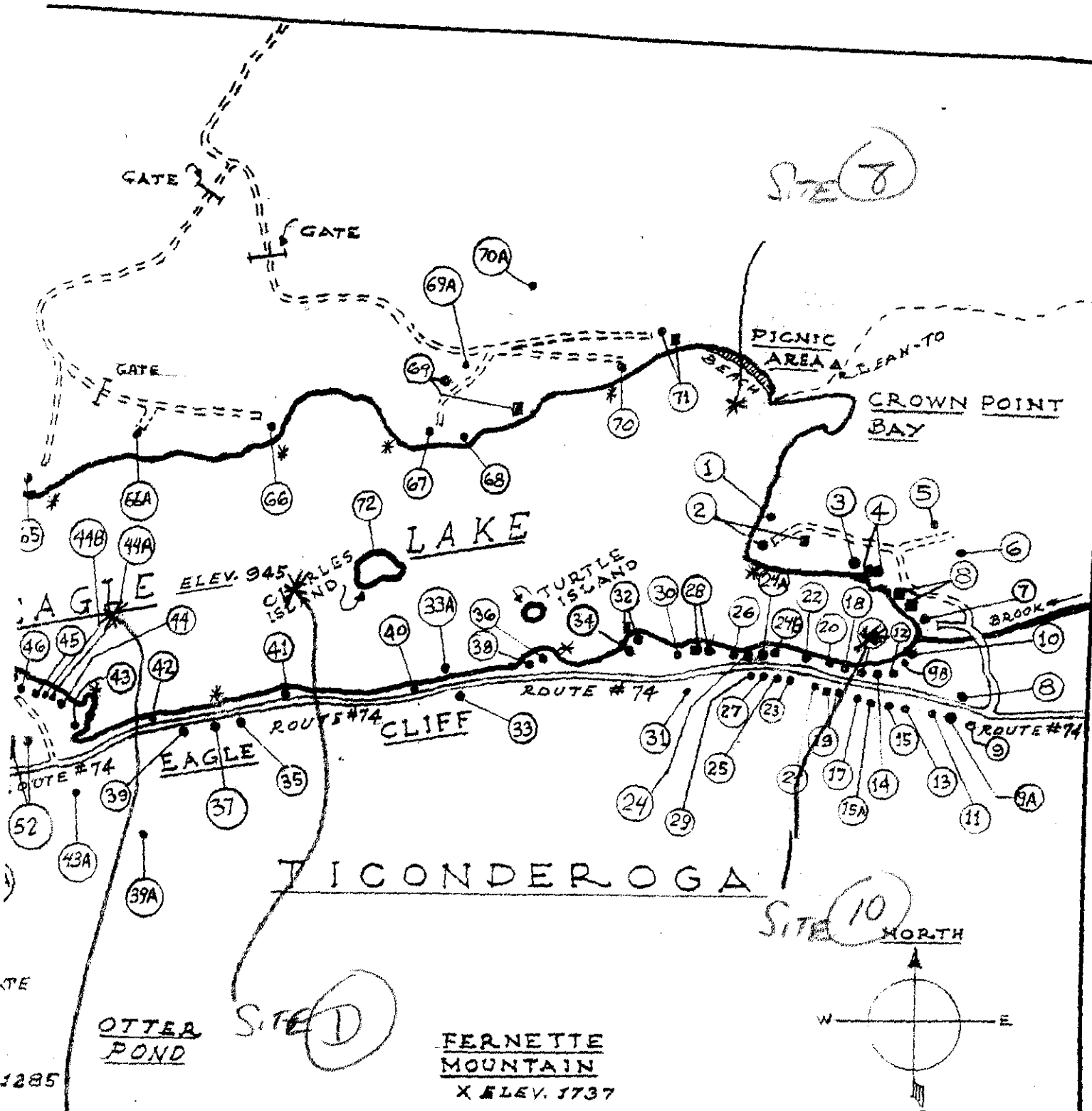
Bob

I included some Acentric alveol into that
I am not sure I gave to you

1	Archbald	33	W. Blanchard	59	Fraize
2 *	I. H. Associates (Baldwin/Harris)	33A	C. Conklin, III NS	60	Ruck
		34	Allen	61	Paddock
3	Walton	35	Watters	62	Martin
4	Buechner/ Cuyler	36 *	Adirondack Alarm Corp/ Kral	63 *	Lisle, Jr.
5	Bartlett	37 *	W. Stone	64 *	Alden
6	T. Smith	38	Pedemonti	65 *	Barwig
7	Secone	39	Bertrand	66 *	Tiedemann
8	Geisel (Vacant)	39A	Hayes & Wicks & Ray NS	66A	Emerich
9	Moran	40	Hickland	67 *	Patterson/ R. Thomson
9A	Van Hoesen	41	Lefevre/ Rheal	68	Hyde
9B	Van Hoesen NS	42	Hannan	69	W. Knauss
10	Putallaz	43 *	Sarah Hayes	69A	R. Wong & E. Knauss/ Rosenblum NS
11	Ploski	43A	M. Sheldon Hayes NS		
12	DeMay	44	Adams	70 *	R. C. Stevens
13	Belkevich	44A	Tobin NS	70A	R. C. Stevens NS
14	Chamberlain	44B	O'Bryan NS	71	J. Stevens & Barnhart, Jr
15	Belkevich	45	Martian	72	C. Conklin, III NS
15A	Vacant (L. Maloney)	46	Loose		Update 3/2000 names/ property loc. added
16	Lazzaro	46A	Loose NS		No Structure
17	Dolback	47	Brooks	NS	
18	DiPoi	48	Spring		
19	Thompson	49	Pynn		
20	R. J. Stevens	50	Riley (Muenleck)		
21	Fleming	51	Crammond		
22	Donnelly	52 *	Burroughs		
23	Deem	53	H. Stubing		
24	D. Blanchard	53A	H. Stubing		
24A	Danzig	54 *	Hoag/ Runge		
24B	Masset	55	Zankel		
25	J. Davis	56	P. Smith		
26	Campion & Collier	56A	P. Smith		
27	Cummings	57	Condon		
28	B. Davis	57A	Ray		
29	Masset	58 *	R. Wickes		
30	J. Davis	58A	Town of Ticonderoga (Chlorination Station)		
31	N. Stevens				
32	Benedict/ Conklin/ Fitzgerald				



* LEGEND OF SYMBOLS ON MAP *	
○ — ●	LOCATION & NUMBER OF PROPERTY OWNER
■	ACCESSORY CAMP BUILDINGS
*	BOAT HOUSE FACILITY AT THIS PROPERTY
B.M. Δ 951	BENCH MARK - ELEVATION 951.00'



PROPERTY OWNER'S MAP & LEGEND OF EAGLE LAKE - ESSEX COUNTY - NEW YORK

SCALE: NOT TO SCALE	APPROVED BY:	R. TIEDEMANN	DRAWN BY SIGLOCH
DATE: APRIL 5, 1993		REVISED 3/12/2000	REVISED JUNE 15/93

MAP OF EAGLE LAKE

EAGLE LAKE PROPERTY OWNERS ASSOC. OF EAGLE LAKE - NEW YORK	DRAWING NUMBER EL-102
--	---------------------------------

BEAR POND

TALLY SHEET Summary

Laboratory Data Sheet: Watermilfoil Herbivores and Associated Damage

Location: **EAGLE L.** Collectors: **BOB** Date of Collection: **7-2-01** Date Examined: **7-10-01**
 Examiner: _____

APICAL STEM SAMPLE	No: A	No: B	No: C	No: D	No:
HERBIVORES					
Moth ADULT (#)					
Moth LARVAE (#)			5	2	
Pupae in cocoons (#)					
Eggs(#)					Continue →
Weevil ADULT (#)					
Weevil LARVAE(#)		7	1	6	
Pupae in pupal chamber (#)					
EGGS(#)		1			
Midges non-damaging(#)				4	
Midges DAMAGING Milfoil(#)			1		
Caddisflies(#)					
Other: Mayflies, etc.					
APICAL MERISTEM DAMAGE					
Healthy apical tip	34	29	28	36	
Minor (a few leaflets missing)		5	1		
Moderate (many leaflets gone)		3	2	2	
Extensive (most grazed/deformed)		2		2	
Tip Missing (end of stem)	3	2	5	5	
STEM DAMAGE					
Healthy Stem	22	14	19	18	
Minor (1-4 scars or <2cm mined)	3	5	5	6	
Moderate (>4 scars or 2-4cm mined)		5	1	1	
Extensive (>8 scars or >4cm mined)		1			
Weevil mining (cm)		17.9	4.2	5.5	
Pupal chambers (# total)					
Scars (# moth, weevil, or other)	6	14	12	12	
LEAFLET DAMAGE					
Healthy Leaflets	21	21	22	18	
Minor (leaflets gone in 1 place)	4	2	1	6	
Moderate (leaflets gone, 2-4 places)		2	2	1	
Extensive (leaflets gone, >4 places)					
Retreats (# total)		3	2	4	
Cocoons (# total)					
COMMENTS					
MOTH LARVAE MEASUREMENTS:					
	body length	head width	body length	head width	body length

7
 Page
 2

127
 6
 7
 4
 15

73
 19
 7
 1
 27.6
 44

82
 13
 5
 9

TALLY SHEET

Laboratory Data Sheet: Watermilfoil Herbivores and Associated Damage

Location: EAGLE L. Collectors: BOB Date of Collection: 7-2-01 Date Examined: 7-10-01
 Examiner: _____

APICAL STEM SAMPLE	No: 8	No: 10	No:	No:	No: TOTAL:	
HERBIVORES						
Moth ADULT (#)						
Moth LARVAE (#)					7	
Pupae in cocoons (#)						
Eggs(#)						
Weevil ADULT (#)						
Weevil LARVAE (#)		10			24	
Pupae in pupal chamber (#)						
EGGS (#)		3			4	
Midges non-damaging (#)					4	
Midges DAMAGING Milfoil (#)					1	
Caddisflies (#)						
Other: Mayflies, etc.						
APICAL MERISTEM DAMAGE						
Healthy apical tip	39	37			203	
Minor (a few leaflets missing)	3	8			17	
Moderate (many leaflets gone)	2	1			10	
Extensive (most grazed/deformed)		2			6	
Tip Missing (end of stem)	4	5			24	
STEM DAMAGE						
Healthy Stem	18	17			108	
Minor (1-4 scars or <2cm mined)	4	5			28	
Moderate (>4 scars or 2-4cm mined)	1	1			9	
Extensive (>8 scars or >4cm mined)		2			3	
Weevil mining (cm)	3.8	13.1			44.5	
Pupal chambers (# total)	1				1	
Scars (# moth, weevil, or other)	9	14			67	
LEAFLET DAMAGE						
Healthy Leaflets	22	19			123	
Minor (leaflets gone in 1 place)	2	5			20	
Moderate (leaflets gone, 2-4 places)		1			6	
Extensive (leaflets gone, >4 places)						
Retreats (# total)		2 Midge			11 (2 midge out of 11)	
Cocoons (# total)						
COMMENTS						
	# 8-8 missing					
	24 stems total					
MOTH LARVAE MEASUREMENTS:						
	body length	head width	body length	head width	body length	head width
1						
2						
3						
4						

A, B, C, D
8, 10

Laboratory Data Sheet: Watermilfoil Herbivores and Associated Damage

Location: Eagle Lake Collectors: Bob Date of Collection: 7/03/01 Date Examined: 7/09/01
 Examiner: Chelsea

APICAL STEM SAMPLE	No: <u>A-1</u>	No: <u>A-2</u>	No: <u>A-3</u>	No: <u>A-4</u>	No: <u>A-5</u>					
Moth ADULT (#)										
Moth LARVAE (#)										
Pupae in cocoons (#)										
Eggs(#)										
Weevil ADULT (#)										
Weevil LARVAE(#)										
Pupae in pupal chamber (#)										
EGGS(#)										
Midges non-damaging(#)										
Midges DAMAGING Milfoil(#)										
Caddisflies(#)										
Other: Mayflies, etc.										
HEALTHY APICAL TIP										
Healthy apical tip	✓✓	✓✓✓ <i>(mostly decayed)</i>	✓✓	✓	✓					
Minor (a few leaflets missing)										
Moderate (many leaflets gone)										
Extensive (most grazed/deformed)										
Tip Missing (end of stem)										
HEALTHY STEM										
Healthy Stem	✓	✓	✓	✓	✓					
Minor (1-4 scars or <2cm mined)										
Moderate (>4 scars or 2-4cm mined)										
Extensive (>8 scars or >4cm mined)										
Weevil mining (cm)										
Pupal chambers (# total)										
Scars (# moth, weevil, or other)										
HEALTHY LEAFLETS										
Healthy Leaflets	✓	✓	✓	✓	✓					
Minor (leaflets gone in 1 place)			✓							
Moderate (leaflets gone, 2-4 places)										
Extensive (leaflets gone, >4 places)										
Retreats (# total)										
Cocoons (# total)										
MOTH LARVAE MEASUREMENTS:										
	body length	head width	body length	head width	body length	head width	body length	head width	body length	head width
	1									
	2									
	3									
	4									

Laboratory Data Sheet: Watermilfoil Herbivores and Associated Damage

Location: Engle L Collectors: Bob Date of Collection: 7/2/01 Date Examined: 7/11/01
 Examiner: Scott

APICAL STEM SAMPLE	No: <u>A-6</u>	No: <u>A-7</u>	No: <u>A-8</u>	No: <u>A-9</u>	No: <u>A-10</u>
Moth ADULT (#)					
Moth LARVAE (#)					
Pupae in cocoons (#)					
Eggs(#)					
Weevil ADULT (#)					
Weevil LARVAE(#)					
Pupae in pupal chamber (#)					
EGGS(#)					
Midges non-damaging(#)					
Midges DAMAGING Milfoil(#)					
Caddisflies(#)					
Other: Mayflies, etc.					
Healthy apical tip					
Minor (a few leaflets missing)					
Moderate (many leaflets gone)					
Extensive (most grazed/deformed)					
Tip Missing (end of stem)					
Healthy Stem					
Minor (1-4 scars or <2cm mined)	(A)				
Moderate (>4 scars or 2-4cm mined)					
Extensive (>8 scars or >4cm mined)					
Weevil mining (cm)					
Pupal chambers (# total)					
Scars (# moth, weevil, or other)	(A)				
Healthy Leaflets					
Minor (leaflets gone in 1 place)	(A)	(A)			
Moderate (leaflets gone, 2-4 places)					
Extensive (leaflets gone, >4 places)					
Retreats (# total)					
Cocoons (# total)					
MOTH LARVAE MEASUREMENTS:					
	body	head	body	head	body
	length	width	length	width	length
1					
2					
3					
4					

Laboratory Data Sheet: Watermilfoil Herbivores and Associated Damage

Location: Eagle L. Collectors: L. J. Date of Collection: 7/1/01 Date Examined: 7/9/01
 Examiner: ALX

APICAL STEM SAMPLE	No: <u>A 11</u>	No: <u>A 12</u>	No: <u>A 13</u>	No: <u>A 14</u>	No: <u>A 15</u>					
Moth ADULT (#)										
Moth LARVAE (#)										
Pupae in cocoons (#)										
Eggs(#)										
Weevil ADULT (#)										
Weevil LARVAE(#)										
Pupae in pupal chamber (#)										
EGGS(#)										
Midges non-damaging(#)										
Midges DAMAGING Milfoil(#)										
Caddisflies(#)										
Other: Mayflies, etc.										
Healthy apical tip	//	//	/		//					
Minor (a few leaflets missing)										
Moderate (many leaflets gone)										
Extensive (most grazed/deformed)										
Tip Missing (end of stem)			✓(cut)	✓(cut)						
Healthy Stem	✓	✓	✓	✓	✓					
Minor (1-4 scars or <2cm mined)										
Moderate (>4 scars or 2-4cm mined)										
Extensive (>8 scars or >4cm mined)										
Weevil mining (cm)										
Pupal chambers (# total)										
Scars (# moth, weevil, or other)										
Healthy Leaflets	✓	✓	✓	✓	✓					
Minor (leaflets gone in 1 place)										
Moderate (leaflets gone, 2-4 places)										
Extensive (leaflets gone, >4 places)										
Retreats (# total)										
Cocoons (# total)										
MOTH LARVAE MEASUREMENTS:	body length	head width	body length	head width	body length	head width	body length	head width	body length	head width
	1									
	2									
	3									
	4									

Laboratory Data Sheet: Watermilfoil Herbivores and Associated Damage

Location: *Eclyte 1* Collectors: *Bob* Date of Collection: *7/9/2001* Date Examined: *7/9/2001*
 Examiner: *Jason*

APICAL STEM SAMPLE	No: <i>A 16</i>	No: <i>A 17</i>	No: <i>A 18</i>	No: <i>A 19</i>	No: <i>A 20</i>					
Moth ADULT (#)										
Moth LARVAE (#)										
Pupae in cocoons (#)										
Eggs(#)										
Weevil ADULT (#)										
Weevil LARVAE(#)										
Pupae in pupal chamber (#)										
EGGS(#)										
Midges non-damaging(#)										
Midges DAMAGING Milfoil(#)										
Caddisflies(#)										
Other: Mayflies, etc.										
HEALTHY APICAL TIP										
Healthy apical tip		<i>1</i>	<i>1</i>	<i>11</i>	<i>1</i>					
Minor (a few leaflets missing)										
Moderate (many leaflets gone)										
Extensive (most grazed/deformed)										
Tip Missing (end of stem)	<i>1</i>									
HEALTHY STEM										
Healthy Stem		<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>					
Minor (1-4 scars or <2cm mined)	<i>1</i>									
Moderate (>4 scars or 2-4cm mined)										
Extensive (>8 scars or >4cm mined)										
Weevil mining (cm)										
Pupal chambers (# total)										
Scars (# moth, weevil, or other)	<i>11</i>			<i>1</i>	<i>1</i>					
HEALTHY LEAFLETS										
Healthy Leaflets		<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>					
Minor (leaflets gone in 1 place)	<i>1</i>									
Moderate (leaflets gone, 2-4 places)										
Extensive (leaflets gone, >4 places)										
Retreats (# total)										
Cocoons (# total)										
MOTH LARVAE MEASUREMENTS:										
	body length	head width	body length	head width	body length	head width	body length	head width	body length	head width
	<i>1</i>									
	<i>2</i>									
	<i>3</i>									
	<i>4</i>									

Laboratory Data Sheet: Watermilfoil Herbivores and Associated Damage

Location: Eagle C. Collectors: Bob Date of Collection: 7/12/01 Date Examined: 7/19/01
Examiner: Jason

APICAL STEM SAMPLE	No: <u>A 21</u>	No: <u>A 22</u>	No: <u>A 23</u>	No: <u>A 24</u>	No: <u>A 25</u>					
Moth ADULT (#)										
Moth LARVAE (#)										
Pupae in cocoons (#)										
Eggs(#)										
Weevil ADULT (#)										
Weevil LARVAE(#)										
Pupae in pupal chamber (#)										
EGGS(#)										
Midges non-damaging(#)										
Midges DAMAGING Milfoil(#)										
Caddisflies(#)										
Other: Mayflies, etc.										
HEALTHY TIP										
Healthy apical tip	1	1	1	1	11					
Minor (a few leaflets missing)										
Moderate (many leaflets gone)										
Extensive (most grazed/deformed)										
Tip Missing (end of stem)										
HEALTHY STEM										
Healthy Stem	1	1		1	1					
Minor (1-4 scars or <2cm mined)			1							
Moderate (>4 scars or 2-4cm mined)										
Extensive (>8 scars or >4cm mined)										
Weevil mining (cm)										
Pupal chambers (# total)										
Scars (# moth, weevil, or other)			1							
HEALTHY LEAFLETS										
Healthy Leaflets	1	1	1	1	1					
Minor (leaflets gone in 1 place)										
Moderate (leaflets gone, 2-4 places)										
Extensive (leaflets gone, >4 places)										
Retreats (# total)										
Cocoons (# total)										
MOTH LARVAE MEASUREMENTS:										
	body length	head width	body length	head width	body length	head width	body length	head width	body length	head width
	1									
	2									
	3									
	4									