



STENOGRAPHIC NOTES

No. 1²



SNOW No. STUDIES - Soda Springs

From JANUARY 14 1942

To APRIL 5 1942

No. 18-G

Date unknown - Spring 1942

- General -

Tahoe cottages visited by Fred Paget.
Snow gone.

Boat house washed away at
Dunce's, south end of tract. Pier
at Greenwood's washed out.

Testing cutter. Make it clean
itself by spiral?

- Snow -

15 in. new snow. No rills.

Crust forms while air temperature
in and above it is above freezing.
Evaporation the cause. It is at
least the rule.

- Old age -

"Often people of my age would be
sitting by the fire in slippers." I can't
understand it. "People just do."

Paul Norbae

"Paul Norbae! But for ^{your} father, God
only knows what would have happened
to snow-surveying."

Thermometers

Max. therm O.K.

Min. " Cor. +2°F

Damers Lake open.

Jan. 14? - To Pasadena

Harry Jones, Todd Kern, and J. E. C.
* Regional Meeting.

Raining right in fog. Visible temperature.
Thursday morning.

Rivers - Kings, Tulare Lake.

Colton - Fog, eucalyptus clumps.

Air, cotton, grapes, flying fields
at Bakersfield.

Tehachapi. Hallands' 4182 ft.
at summit.

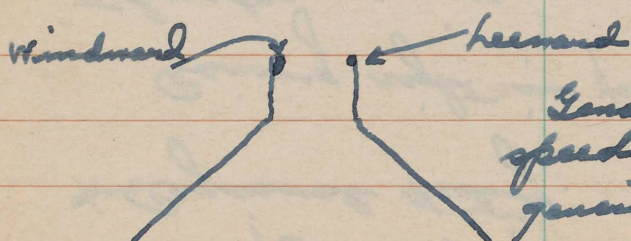
Snow patches numerous over
hills. Cold weather?

Saturday, Jan. 17

Ashton Codd will go to Soda Springs.

*

- Stevens W -



Generator has fair speed but the heat generated is insufficient.

The slats also are frozen.

The spring on the motor needs adjustment to draw propeller back to vertical when the wind moderates.

Wednesday, Jan. 21

Found Ashton Codd, Tony Palos, and Winters working on the Loge at Soda Springs. Stevens W. joined them. Harry Cursey and Todd went on to Reno.

Soldiers - "Shot at sight."

Decorations in Hotel - Swiss-Austrians dancing.

Caterpillar fails to climb snow to ski-tow on snowfields. But snow packed.

February 7

Blizzard last night.

Precip. to 7am. 1+ in. ↑

- Stevens Generator *

Generator turned up again. Develops no heat. Taken down for return to San Francisco.

- Stevens W *

Batteries dead again. Need diagram of wiring. Short circuit in instrument. Ammeter loaned.

→ Too brief: When did Poloc and Wintner leave
for S.F.? When did Rupp come up?
Any details in correspondence?
When did Jorgensen and ? come? Mch. 11.

by Telephone Co. Need diagram
of wiring.

Water or snow? Water in mercury
cups but no record of activity.

Taking batteries to San Francisco.
Will stick with it.

- Snow -

Snow dry today. Surface drifting
but no drift in cans. See
record of snow survey.

Precip. from above 1" in. water
in last 24-hours.

- Tractor -

Tractor (cat) bogged on path
from Hotel to railroad. Worked
back out.

- Barometer -

Stays in lowlands, storm cap
on summits. But barometer
still low. Aneroid for ~~the~~ Hotel?

- Snowing -

1 pm. Heavily snowing - "one-way"
traffic. Cornices for Eric Mack
to photograph -

Oliver Kehlein -

Oliver Kehlein heads SRI School at San Francisco. Interested in SRI meets. Goes to various courses each week end.

Wants avalanche film.

- Hotel -

Full up at Hotel. Only \$3.⁵⁰ for us.

February 10 - Tahoe Tahoe -

Tahoe Feb 10 ... 6228.3 ft.

To go ... 0.8 ft.

Area 123,000 acres

1 ft. deep = 123,000 acre feet.

1000 Sec. ft. discharge = 2000 acre feet daily.

Possible draft = .02 ft daily or
0.60 ft per week.

at 65% rise = 1.09 ft.

If no or little further precipitation
shrinkage of 25% of normal
or 0.42 ft. Net 0.67 ft.

Temperature at Soda Springs

February 1942

Date	Max.	Min.*	Mean above 32°F
1	39	20	
2	35	22	
3	36	24	
4	32	25	
5	32	25	
<hr/>			
6	38	27	3
7	33	20	1.5
8	31	5	-0.5
9	32	1	0
10	37	4	2.5
<hr/>			
11	42	8	5
12	44	8	6
13	36	12	2
14	30	10	-1
15	30	-2	-1
<hr/>			
16	33	-6	0.5
17	36	-7	2
18	46	12	7
19	44	9	6
20	43	7	5.5

* "Add +2.0°F to all min. temps." —
Torgensen.

Date	Max.	Min.	Mean above 32°F
Feb. 21	46	20	7
22	36	17	2
23	36	-16	2
24	38	-12	3
25	27	2	-2.5
26	42	-8	5
27	40	-3	4
28	33	16	0.5
March 1	40	6	4
2	59	5	14.5

- Failures -

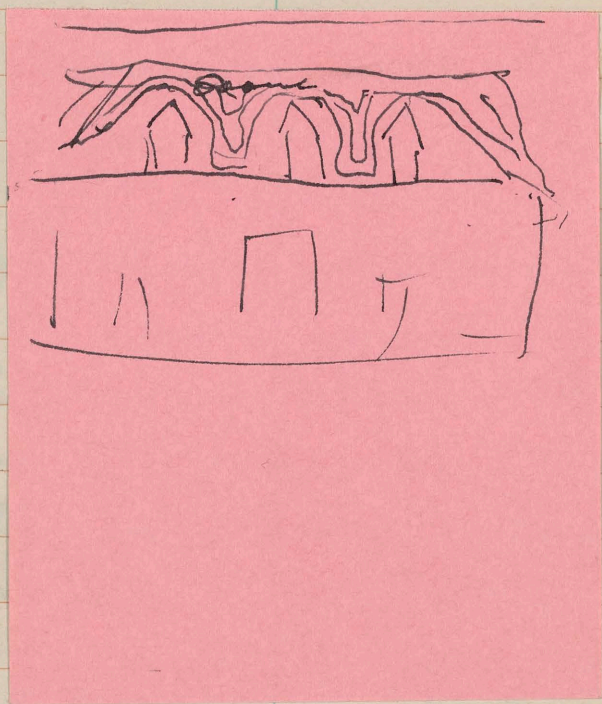
Record sheet clogged or rather has bunched.

Tripod of generator forced south. North leg slipped or forced down 6 in. Two south legs forced over. Settling snow? Cant be free footing.

New batteries must be housed outside recorder case. Must be water-proof and insulated. Can wire be protected?

— Snow Creep —

Remarkable. Snow starts over
southern windows of inn (Beacon
Hill Lodge) just west of Soda Springs
Hotel



asked Ollie Busck to get someone
to photograph it, for my bus was
over then due.

Later: She got Dick Landis to do so.
Views are published in Sci. Mo. March 1942
and Report of Committee on Snow & Ice
1942.

- Snow Surveys -

	depth	Water Equir.
Jan. 30, 1942	74.8	24.8
Feb 5, 1942	102.1	30.8
Feb 27, 1942 (11 am)	99.5	38.8

- Schedule -

Apr 2. Thurs. Soda Springs
" 3 Fri. Summit

Eddy will write approx March 27

- Snow Conference -

Blair Eddy would like to come to Snow Conference next year at Berkeley. Ill write G. F. George about it.

Blair likes the trans. for little knives in snow surveying. Send him Sci. Mts.

- Cutting Snow -

Suggested to Jones use of flat table on snow to cut snow-biscuits and melt them to compare with standard gage (unshielded). Will carry it all.

- Melting this Month -

Markers on north (sunny) side of highway vary from 1 foot in the clear to 9 inches and flush. Bank vertical.

But on south (shaded) side markers are 1 foot in snow bank to flush.

Only melting under direct rays of sun can have caused it.

- Chart of Accumulated Snowfall -

→ Jones has a chart of accumulated snowfall in the United States. Why not get it photostated and placed on sale? He agrees.

- Autumn Moisture -

Jones: "If autumn wet and snow falls, there will be some runoff during winter sufficient for springs and domestic use.

"But with dry autumn and cold winter there will be no runoff."

- Stevens W -

Diameter of L.V. Receiver 30 in.
Need new wind shield 42ⁱⁿ (3½ ft) diam.

Need tarpaulin

2½ x 3 lath lengths [1 lath = 4 ft]
i.e. 10 x 12 ft. water-proof
but light. Eyes in it. Screw-
hooks to hold it in place.

Time element. Pulleys make travel
of weight shorter. Pipe holding
weight too small to pull up
over collar. No need for
tower higher than snow cover
requires.

Water-tight battens on door are
at least tight against condensation
of moisture.

Batteries -

6 new ones: 3 of 6 volts instead
of 6 of 3 volts. Half life.

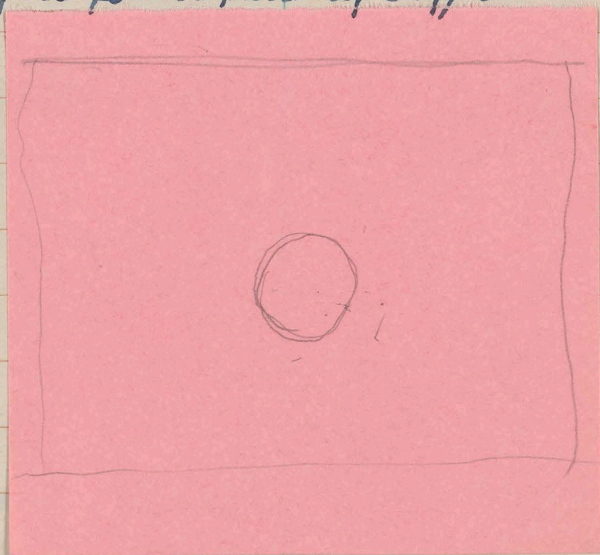
Frozen, wet, or shorted? Dead.
Any data on freezing? Chisum's and
Bureau of Standards.

Generator - Snow is accumulating on

Tripod points. Lower the braces.
Spring also is weak.

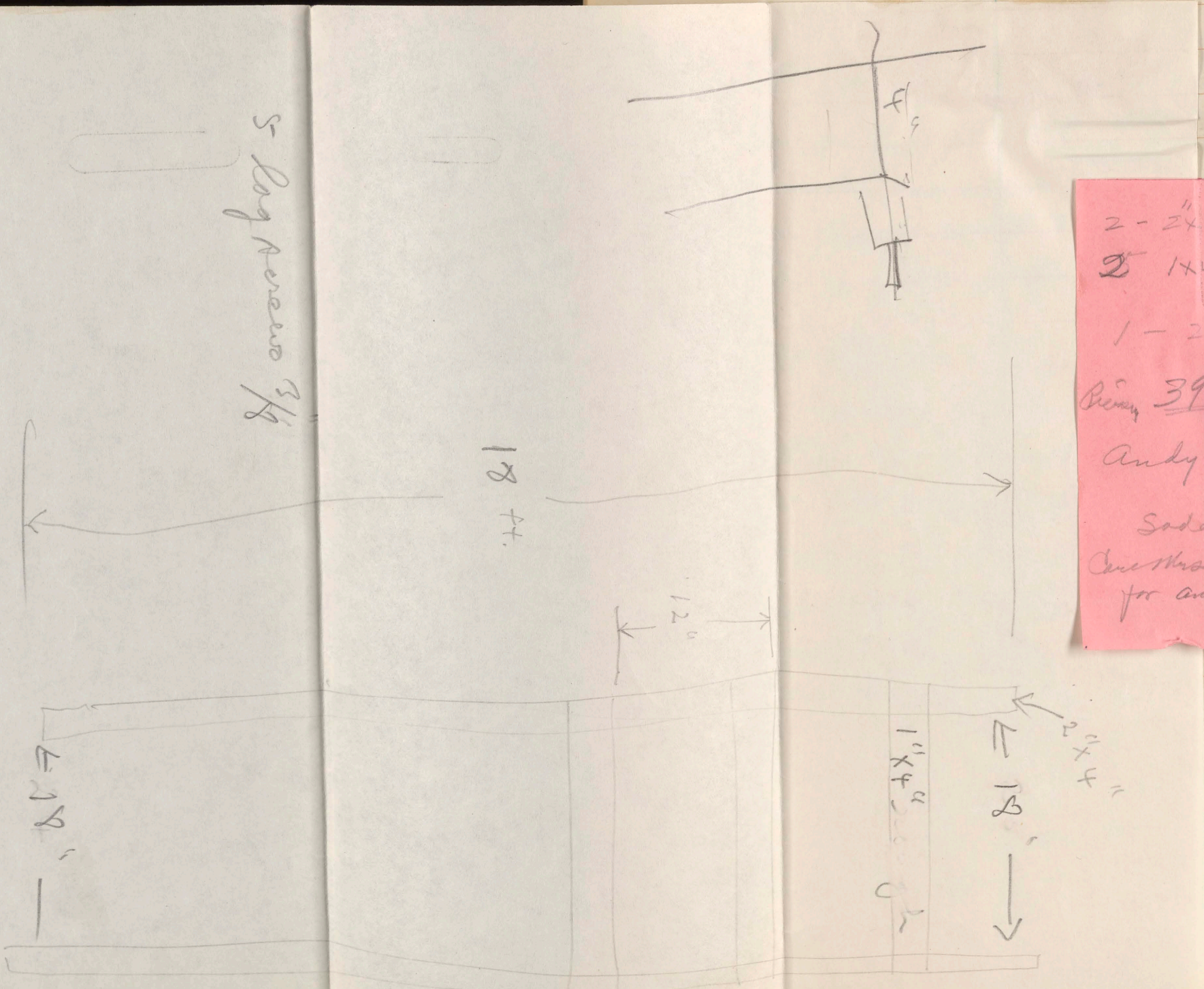
- Comparative Snow Catch -

Precip. 1 near Jan 30 - Feb 5 9 am
Snow-survey . . . 6.0 in.
Shielded gage 5.35 (Frig)*
Standard " 4.10
* Orifice found partially clogged.



Feb 5 noon to Feb 6 3 pm.
2.60 in. (Recording) logging less.
Curley. Standard can 7 am to 7 am
2.11 in.

Specifications for Ladder
for Fire Tower



5 Log Screws 3/4"

No. 1
2 - 2x4x15 ft
2 - 1x4x14 ft
1 - 2x2 - 12 ft
Benny 3968
Andy - Com 7131
Soda & pop Stat.
One Mrs. Belton
for Andy for ladder

March 2

- Lake Trogen -

Lake Norden snow covered. One small opening on north side.

Donner Lake. - Thin covering of ice with narrow lead across lake from north to south and small areas of open water.

Soda Springs

ammeter safely at Hotel door, telephone man who loaned it to us did not find it.

Pl & E men made snow-survey last Friday or Thursday (Feb 28 or 29). Records from Trig precip. gage sent to San Francisco as soon as removed.

— Precipitation Record —
Standard Gage (in.)

1942	Water Equiv.	Snowfall	Depth of Snow on Ground
Feb 1	0.05	1	84
2	0.53	8	86
3	1.24	15	92
4	0.90	11	102
5	1.24	14	110
<hr/>			
6	2.11	19	126
7	1.12	13	139
8	0.18	2	140
9	—	—	136
10	—	—	132
<hr/>			
11	—	—	130
12	—	—	125
13	0.06	1	124
14	—	—	123
15	—	—	122
<hr/>			
16	0.10	1	123
17	—	—	120
18	—	—	118
19	—	—	116
20	—	—	115

	Water equiv.	Snowfall	Depth of Snow on Ground
Feb. 21	-	-	114
22	0.57	8	120
23	-	-	118
	[Max 32°F, min. -16°F Coldest day of year]		
24	-	-	116
25	0.21	3	119
26	-	-	117
27	-	-	115
	[Survey? 99.5 in.]		
28	-	-	112
Mar. 1	-	-	109
2	-	-	105

Date uncertain

Take photos

Incipient snow forms.
in river below dam.

Write Paget re snow-course markers.

Buy and Postal Teleg. sale,
Postal Teleg. sale to P.S. 681 sale.
on Cass flat also markers are
down.

Boys (Eddy and helper) may be called
to war - this summer early.

Get snow chart from Jones.

Send 6 copies report to George Sales
Sales prints

- Tests -

Batteries (6 volts)

0°F or lower approx. 0°F $\left. \begin{array}{l} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \end{array} \right\} 25$

Feb 17 (Start) 12 1/2 amps 18"

Feb 25 8 amps 2

Mar 6 1/2 amp. 0

Then placed ~~in~~
in warm room 65-70°F.

Mar 7 5pm. 10 amps 15

" 9 5pm 10 amps 16

" 14 Noon 7 " 14

Both still 6 volts

Steel of cutters too hard.
Cutters of Stevens W dead.

March 10, 1942.

Runner lane open.

March 11 New snow 6 in (Water equiv. 0.68ⁱⁿ)

Large funnel
Ladder

Snow Depth

Ply + E standard board 7 1/2 ft.

Old gage on telegraph pole 6 3/4 ft

Near trail from S.S. hotel to track

Shovel handle + 1 ft.

Snowing since last evening

6 in till 10 am. = 0.68ⁱⁿ water

Highway at noon melted clear

of snow. Chains now unnecessary.

Andy learning "Curley's" (W. H. Sanders)
work. Has had experience with
S. P. Ry and worked twenty years
at Donner Resort.

Stevens II

D.L. Jorgensen reporting Stevens II.
Found drop of mercury and loose
binding post. Will send detailed
report to Stevens, Ruff, Codd,
and myself.

Int. Drier

Try sawdust

Ladder for Fritz Tower

2x4", sides on edge. Log screws.
Andy will assemble and paint it.

26 ft 1x4" S4S #1

Ladder

pieces
2 - 2x4 x 18 ft, S4S #1

18 in. spread,

Plenty 1x4 for rounds,

Nails (cement) 3-10 pennies
for each end
of rounds

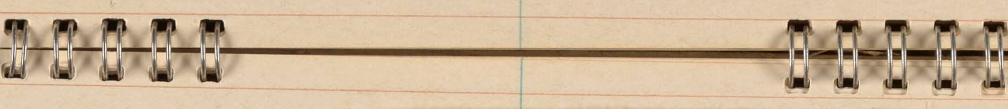
Butter chip gray for ladder

Log screws - 5 on ^{one} side
5 bolts for other side [3/8"]

add ^{20 pieces} 2x3 to hold ladder out
from tower.

See 3/8" x 7" Log screws

See 3/8" x 7" mech. Bolt



1/2 H.
 6 3/4
 to look

Tim.
 sum = 0.68 m
 water.
 of
 necessary,
 " "
 next
 at S.P. by
 Donor
 (to Strons)
 of & measuring
 filed
 re
 Trans. W.

Ice Crystals

Not caused mainly by warm ground but by sun.

at lower snow was shallow, therefore was weathered to the ground. On hill the crusts were far coarser than the bottom stratum.

New snow today is fine textured tho moist. Does new snow have smaller crystals?

At ~~5~~ Bug Station snow bank (remnant) is coarse ice crystals frozen so that they had to be ground loose like rock salt with my heel.

→ Snow does not melt until 35°F in the shade. How warm in the sun? 35°F shade = 40°F sun?

March 24 (Reno)

"Spring is in the air" - Nit.
So damp that the cold penetrates almost worse than Greenland.

Walking thru park again. Bus too far.
Snow Report almost a popular

Story - line Rockefeller Foundation's
Soda Citizen Care - "William Randolph
Heard."

March 25

To Soda Springs tomorrow. Storm
on hills.

Helping Jean Wymen return security
pins. Some girl failed - "Mary Hill."

March 26 Trip to Soda Springs Station.

Snow-line (both N. and S. slopes) at
Floriston. Snow at Donner Lake
one-half fence high.

Band of dirt and snow below Pass.
Diesel or dust? Later: thrown by
snow plow from road.

Stakes in edge of snow on S. side.
Snow well back on N. side.

Road dry.

Stevens W

Generator blade thrown up. Wind
from E. 20 mi. Must help blade back.
But when cold the blade must be
started. Lubrication frozen?

CALIFORNIA COOPERATIVE SNOW SURVEYS
SNOW SURVEY NOTES

Drainage Basin South Yuba River
Snow Course Summit
Party B. Eddy + A. Chase
Date 1-30-42

*Description or Number of Course (1)	Sam-ple Num-ber (2)	§Distance Between Samples (3)	Depth of Snow Inches (4)	Length of Core Inches (5)	Water Content Inches (6)	Density 100 x (6)/(4) (7)	Remarks
	1	25	80	78	27		Dirt
Key	2		77	75	25		"
	3		86	83	28		"
Course	4		83	79	26		Ice
	5		84	80	26		Dirt
	6		84	83	27		"
	7		90	87	30		Gravel
	8		87	85	27		Ice
	9		81	78	24		Rock
	10		81	78	24		Dirt
	11		79	77	25		"
	12		75	73	24		"
	13		78	75	26		"
	14		85	82	29		"
		11.50			3.68		
		82.1			26.3		32.0% D
		26.3/47.8 =			55.0		70.7% N

*Show number or description as given on sketch map, i.e., "Course No. 1," or "Major Course," or "N 5° E," etc.

§Always start measurements for sampling from the initial point as shown by the sketch map of the course and follow the spacing for samples as indicated by the circles. Particular care should be taken to note any irregular spacing between samples.

No. of sheets. Comp. by checked by

Batteries dead. Check and check O.K.
 { Guide line checks made by check
 but no response from neighboring bar.

Andy, when in telephone service at Chico, went nearly every month to Stirling?, a colder place, to replace the batteries.

Ski Accidents

"Most ski accidents are by novices who take the ski tows and then must slide back. Training on gentler slopes essential. Must not fall forward."

Snow Mat

Try asbestos board.

Mar 27 -
 No 1 (Key) Survey
 Feb, Mar, May 1
 But April
 No 1 + No 2
 No 1. 82.9 37.4 45.1%
 No 2 86.1 38.8 45.1%
 OR 84.5 38.1 45.1 = 90.9%
 Mar 27

Snow Surveys

La Springs (Key Course)
 99.5" Water 2.38.8" Dens. 38.9%
 82.9 37.4 45.1
 -1.4
 Summit (Key Course)
 105.7 40.5 38.3
 91.5 42.0 45.9
 +1.5

CALIFORNIA COOPERATIVE SNOW SURVEYS
SNOW SURVEY NOTES

Drainage Basin South Yuba River
Snow Course Soda Springs
Party B. Eddy + H. Chase
Date 1-30-22

*Description or Number of Course (1)	Sample Number (2)	Distance Between Samples (3)	Depth of Snow Inches (4)	Length of Core Inches (5)	Water Content Inches (6)	Density 100 x (6)/(4) (7)	Remarks
	1	25'	76	73	25		Dirt
Key	2		72	70	26		Water
	3		79	77	30		✓
Course	4		76	74	25		✓
	5		75	72	24		Grass
	6		73	71	23		✓
	7		72	70	23		✓
	8		71	70	22		✓
	9		75	72	24		✓
	10		79	77	26		✓
			748		248		
				10)	248		
					24.8		
	avg		74.8		24.8		33.2% D.
			24.8		=		59.0% of 4/1 N.
			42				

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Ski Accidents

"Most ski accidents are by novices who take the ski tows and then must slide back. Training on gentler slopes essential. Must not fall forward."

Snow Mat

Try asbestos board.

Snow Surveys

	Soda Springs (Key Course)		
Feb 27	opt 99.5 ⁱⁿ	Water 2. 38.8 ⁱⁿ	Dens. 38.9%
Mar 27	82.9	37.4	45.1
		-1.4	
	Summit (Key Course)		
Feb 27	105.7	40.5	38.3
Mar 27	91.5	42.0	45.9
		+1.5	

CALIFORNIA COOPERATIVE SNOW SURVEYS
SNOW SURVEY NOTES

Drainage Basin South Yuba River
Snow Course Soda Springs
Party B. Kelly & J.H. Chase
Date Feb. 5-22

*Description or Number of Course (1)	Sample Number (2)	Distance Between Samples (3)	Depth of Snow Inches (4)	Length of Core Inches (5)	Water Content Inches (6)	Density 100 x (a) (4) (7)	Remarks
Key	1	25	102	99	30		Dirt
	2		100	98	30		✓
Course	3		100	98	30		Ice
	4		104	100	33		Grass
	5		101	98	31		✓
	6		102	98	30		Ice
	7		102	98	30		✓
	8		104	100	33		Grass
	9		103	99	31		✓
	10		103	98	30		✓
			102.1		30.8		
					30.8		
					10)		
			102.1		30.8		30.2% D
					24.8		
					6.0		
							Recording tape 5.35

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"Most ski accidents are by novices who take the ski tows and then must slide back. Training on gentler slopes essential. Must not fall forward."

Snow Mat

Try asbestos board.

Snow Surveys

Soda Springs (Key Course)

Feb 27 Depth 99.5" Water 2.38.8" Dens. 38.9%

Mar 27 82.9 37.4 45.1
 -1.4

Summit (Key Course)

Feb 27 105.7 40.5 38.3

Mar 27 91.5 42.0 45.9
 +1.5

CALIFORNIA COOPERATIVE SNOW SURVEYS
SNOW SURVEY NOTES

Drainage Basin South Yuba River

Snow Course Summit

Party B. Eddy + A. Chase

Date Feb. 27-1942

*Description or Number of Course (1)	Sample Number (2)	Distance Between Samples (3)	Depth of Snow Inches (4)	Length of Core Inches (5)	Water Content Inches (6)	Density 100 x (6)/(4) (7)	Remarks	
	1	25	100	98	39		Dirt	
Key	2		100	97	38		Rock	
	3		105	100	39			
	4		108	105	41		Dirt	
Course	5		107	104	40		✓	
	6		108	105	42		✓	
	7		112	109	44		✓	
	8		106	104	40		✓	
	9		109	106	41		✓	
	10		106	103	42		Mud	
	11		109	106	42		✓	
	12		96	93	36		Dirt	
	13		102	99	40		✓	
	14		113	109	44		✓	
			145	1481		568		
				105.8		40.6		

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Ski Accidents

"Most ski accidents are by novices who take the ski tows and then must slide back. Training on gentler slopes essential. Must not fall forward."

Snow Mat

Try asbestos board.

Snow Surveys

Soda Springs (Key Course)

Feb 27 depth 99.5" Water 2. 38.8" Dens. 38.9%
 Mar 27 82.9 $\frac{37.4}{-1.4}$ 45.1

Summit (Key Course)

Feb 27 105.7 40.5 38.3
 Mar 27 91.5 $\frac{42.0}{+1.5}$ 45.9

CALIFORNIA COOPERATIVE SNOW SURVEYS
SNOW SURVEY NOTES

Drainage Basin: South Yuba River
Snow Course: Soda Springs
Party: B. Eddy & H. Chase
Date: 2/27/42

*Description or Number of Course (1)	Sam-ple Num-ber (2)	§Distance Between Samples (3)	Depth of Snow Inches (4)	Length of Core Inches (5)	Water Content Inches (6)	Den-sity 100 x (6)/(4) (7)	Remarks
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	6		100	98	40		✓
	7		98	95	38		✓
	8		96	94	38		Grass
	9		100	97	39		✓
	10		104	100	40		✓
av.			99.5		38.8		

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Feb 27	105.7	40.5	38.3
Mar 27	91.5	$\frac{42.0}{+1.5}$	45.9

Tanner Pass
Snow Cover
 March 26, 1942

Summit (Key Course)
 D. 91.5 W. 42.0 Dens. 45.9
 Summit Valley #1
 D. 87.1 W. 40.9
 #2
 D. 89.5 W. 41.5
 Soda Springs (Key Course)
 D. 82.9 W. 37.4 Dens. 45.1
 #2
 D. 86.1 W. 38.8 " 45.1
 Aven. 84.5 38.1 45.1
 Cisco Flat (Feb. 26)
 D. 51.5 W. 22.5

Remarks
Dirt
Rock
-
Dirt
-
Rock
-
-
Dirt

Average 51.5 22.5

*Show number or description as given on sketch map, i.e., "Course No. 1," or "Major Course," or "N 5° E," etc.

§Always start measurements for sampling from the initial point as shown by the sketch map of the course and follow the spacing for samples as indicated by the circles. Particular care should be taken to note any irregular spacing between samples.

No. of sheets. Comp. by checked by

60280 7-38 200-25

STATE PRINTING OFFICE

Batteries dead. Check and check O.K.
 { Guide line checks made by check
 but no response from weighing bar.

Andy, when in telephone service at Chico, went nearly every month to Stirling?, a colder place, to replace the batteries.

Ski Accidents

"Most ski accidents are by novices who take the ski tows and then must slide back. Training on gentler slopes essential. Must not fall forward."

Snow Mat

Try asbestos board.

Snow Surveys

Soda Springs (Key Course)
 Feb 27 opt. 99.5ⁱⁿ Water 2. 38.8ⁱⁿ Dens. 38.9%
 Mar 27 82.9 37.4 45.1
 -1.4
 Summit (Key Course)
 Feb 27 105.7 40.5 38.3
 Mar 27 91.5 42.0 45.9
 +1.5

DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER RESOURCES
401 PUBLIC WORKS BUILDING
SACRAMENTO

CALIFORNIA COOPERATIVE SNOW SURVEYS
SNOW SURVEY NOTES

Drainage Basin South Yuba River
Snow Course Cisco Flat
Party B. Eddy + F. Chase
Date 3/26/42

*Description or Number of Course (1)	Sam-ple Num-ber (2)	§Distance Between Samples (3)	Depth of Snow Inches (4)	Length of Core Inches (5)	Water Content Inches (6)	Den-sity 100 x (6)/(4) (7)	Remarks
	1	25'	45	43	20		Dirt
	2		45	43	20		
	3		49	46	21		Rock
	4		48	47	21		-
	5		50	48	21		-
	6		51	49	22		Dirt
	7		51	50	23		-
	8		51	49	23		-
	9		54	51	23		Rock
	10		58	56	25		-
	11		58	56	25		-
	12		59	57	26		Dirt
Average			51.5		22.5		

*Show number or description as given on sketch map, i.e., "Course No. 1," or "Major Course," or "N 5° E," etc.

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"Most ski accidents are by novices who take the ski tows and then must slide back. Training on gentler slopes essential. Must not fall forward."

Snow Mat

Try asbestos board.

Snow Surveys

	Soda Springs (Key Course)		
Feb 27	Depth 99.5 ⁱⁿ	Water 2. 38.8 ⁱⁿ	Dens. 38.9%
Mar 27	82.9	$\frac{37.4}{-1.4}$	45.1
	Summit (Key Course)		
Feb 27	105.7	40.5	38.3
Mar 27	91.5	$\frac{42.0}{+1.5}$	45.9

Weather Record

March 1942 - Soda Spg. Stat.

40	Max.	Min.	Dpt. in	Precip. Standard Gage in.
1-	40	6	109	
2.	29	5	105	
3.	48	19	102	
4.	44	19	98	
5.	58	13	94	
6.	52	14	92	
7.	38	8	88	
8.	55	5	84	
9.	57	12	81	Cloudy
10.	65	14	80	
11.	48	18	86	0.68 Cldy
12.	48	25	90	0.50 "
13.	47	17	98	0.52 "
14.	24	10	103	? * net. 0.3 "
15	30	15	105 1/2	0.15 **

* Unmelted 5" in
** " 2 1/2

Weather Record

	Max.	Min.	Dpt. in	Precip.
16?	8	5	105	
17	45	8	103	
18	48	8	99	
19	52	18	98	
20	35	18	96 1/2	
21	52	7	94 1/2	
22	48	7	92 1/2	
23	45	7	90	
24	40	8	89	
25	38	-5?	88	
26	43	18	87	
27	40	3	86	- stars 84
28				
29				at 10 am. Solar halo in color.
30				at 2 pm. sky overcast. (light faint shadow).
31				

Precip. Mch 1-27. 2.15 in.
by standard gage.

March 29

Stevens W

With Eric Mason to Soda Springs.

Batteries 15 volts but only 2 amperes.
Dead again.

Snow Melt

Temp. 11 a.m. 50° F calm. Faint shadows.
Snow just becoming wet. On best
trail snow nearly and wet.

Observations at
Soda Springs Station

Sunday Mch 29.

All day snow frozen or
only surface damp in
shaded ^{porch} vestibule of front
of hotel.

Sunday April 5.

"On Friday night heavy
rain and snow"

"Precip. for 10 days (Curley was
here but sick) no daily meas.
But total Apr 4 was 2.24 in.
(prob. since survey was
made).

Apr. 5. snow 3 in. approx. =
0.50 in. water.

at 10:30 snow wet and
soggy beneath new snow,
and new snow moist.

11:30. new snow wet
enough to make good balls.

Soda Springs Station

Mch 29, 1942 with
Gene Mack:

Batteries 15 volts but
only 2 amperes.
Reed again.

Temp. 11 a.m. 58°F. calm
faint shadows.

Snow just becoming
wet. On basket trail
snow nearly subwet.

12 Noon:

Below 6000 ft. snow
coarse. Can be packed
into snowballs. Ice
already melted at
edge of pool and on
surface. But snow
melted only 1/2 in. down.

12 Noon. Below 6,000 ft. snow
coarse. Can be packed into snowballs.
Ice already melted at edge of pool
and on surface. But snow melted
only 1/2 in. down.

Radiation Effects

Pits caused by gravel thrown by
snow-plow. Larger clumps of gravel
make cone-pits. Individual pebbles
sink directly down making only a
pipe-stem tube. All 5 1/2 in. deep,
broad and narrow.

Watch this growth.

all day snow frozen or only surface-
damp in shaded porch at front of hotel.

Sunday April 5* Precipitation

Soda Springs

"On Friday night heavy rain and
snow"

"No daily measurement of precipitation
for 10 days ('Curley' was here but sick).
But total April 4 was 2.24 in. (probably
since survey was made). April 5 snow
3 in. approx. = 0.50 in. water.

Snow Melt

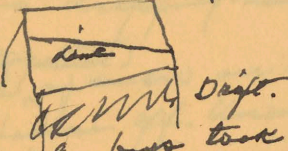
at 10:30 a.m. snow wet and soggy

* Trip with Todd
and friends to see.

On Donner Summit
only 2 mi. of packed
thin snow on road.

~~at 10:30~~
Breaking clouds over
Donner Lake like clouds
at long camp on Mt. Whitney.

~~at 10:30~~
An Office at Donner Hotel
snow slid unevenly on
roof.



One of the boys took two
pictures for me with Brownie

1:30 pm.
New snow ripening.
Ice crystals forming.
Old snow beneath coarse.
"Cairn snow".
New snow packs readily
but loses no water
except when on wind.

Soda Goggles Station

March 29, 1942 with
Gene Mack:

Batteries 15 volts but
only 2 amperes.
Reed again.
Temp. 11 a.m. 50°F. cold
faint shadows.
Snow just becoming
wet. On basket bed
snow nearly and wet.

12 Noon:
Below 6000 ft. snow
coarse. Can be packed
into snowballs. Ice
already melted at
edge of pool and on
surface. But snow
melted only 1/2 in. down.

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Pits caused by gravel thrown by
snow-plow. Larger clumps of gravel
make cone-pits. Individual pebbles
sink directly down making only a
pipe-stem tube. All 5 1/2 in. deep,
broad and narrow.

Watch this growth.

all day snow frozen or only surface-
damp in shaded porch at front of hotel.

Sunday, April 5* Precipitation

Soda Springs -
"On Friday night heavy rain and
snow"

"No daily measurement of precipitation
for 10 days ('Curley' was here but sick).
But total April 4 was 2.24 in. (probably
since survey was made). April 5 snow
3 in. approx. = 0.50 in. water.

Snow Melt

at 10:30 am. snow wet and soggy

* Trip with Todd
and friends to ski.

or opaque surfaces.
Capillarity on wood 1 in.
but on hard surface
at railway station
capillarity was 2 in.
Thus deep slush on
slate rock in Lima?

An warmed roof
new snow melted completely.
Eaves dripping heavily.

(top knot)
Hood of snow on toilet
has fallen off. Uneven
melting on N. + S. sides
caused it to topple just
before recent storm.

Soda Offs Station

Mch 29, 1942 with
Gene Mack:

Batteries 15 volts but
only 2 amperes.
Dead again.

Temp. 11 a.m. 50°F. calm
Faint shadows.

Snow just becoming
wet. On hastes trail
snow nearly subwet.

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Below 6000 ft. snow
coarse. Can be packed
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all day snow frozen or only surface-
damp in shaded porch at front of hotel.

Sunday, April 5* Precipitation

Soda Offs Station

On Friday night heavy rain and
snow

"No daily measurement of precipitation
for 10 days ('Curley' was here but sick).
But total April 4 was 2.24 in. (probably
since survey was made). April 5 snow
3 in. approx. = 0.50 in. water.

Snow Melt

at 10:30 a.m. snow wet and soggy

* Trip with Todd
and friends to see.

Temps. Apr 5/42.

10:25 am. Merc. in shelter
38.2°F.
Sun outside.

2 pm. Some clouds.
Divergence in shelter
Merca 39.5°F 39.5°F
Recorder 41.5°

Corr. for Rec. = 2°F.

	Temps in Shelter (M)	+ under sheet on snow (R) uncorr.
3 pm	38°F	44°F
3:45 pm	39	42
4 pm	38	42
4:15	35	37

Overcast, snowing.
Snow wet but has ceased active melting.

4:50 33 1/4 36 1/4
Still snowing lightly.
pellets pack only under compression
(See 4a etc.)

Soda Offg Station

Wch 29, 1942 with
Tomie Mack:

Batteries 15 volts but
only 2 amperes.
Reed again.

Temp. 11 a.m. 50°F. calm
Faint shadows.

Snow just becoming
wet. On basket bed
snow nearly subwet.

12 Noon:
Below 6000 ft. snow
coarse. Can be packed
into snowballs. Ice
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edge of pool and on
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Watch this growth.

all day snow frozen or only surface-
damp in shaded porch at front of hotel.

Sunday, April 5* Precipitation

Soda Offg -
"On Friday night heavy rain and
snow"

"No daily measurement of precipitation
for 10 days ('Curley' was here but sick).
But total April it was 2.24 in. (probably
since survey was made). April 5 snow
3 in. approx. = 0.50 in. water.

Snow Melt

at 10:30 am. snow wet and soggy

* Trip with Toled
and friends to mri.

5pm.

Shelter	On Snow
M	R
33 1/4 °F	36 1/2 °F

Snowing heavily.

5:45pm

32 1/3

36

Tiny crust-
lations.

Wind light.

6:20pm.

29 1/2

36

Overcast but snowfall
stopped.

Note below 32°F. with
snow still moist

6:55pm.

31 1/2

34°

Snow pellets dry. ^{diff now only 1/2 °F.}
Snow beneath becoming
hard and dry.
Snow in beaten path
beginning to crunch.
Water drops on iron railing
Water pools still on stone steps.

[See 46]

Soda Goggles Station

Mch 29, 1942 with
Gene Mack:

Batteries 15 volts but
only 2 amperes.
Reed again.

Temp. 11 a.m. 50°F. calm
Faint shadows.

Snow just becoming
wet. On beaten trail
snow nearly and wet.

12 Noon:

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coarse. Can be packed
into snowballs. Ice
already melted at
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surface. But snow
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make cone-pits. Individual pebbles
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broad and narrow.

Watch this growth.

all day snow frozen or only surface-
damp in shaded porch at front of hotel.

Sunday, April 5* Precipitation

Soda Springs

"On Friday night heavy rain and
snow"

"No daily measurement of precipitation
for 10 days ('Curley' was here but sick).
But total April 4 was 2.24 in. (probably
since survey was made). April 5 snow
3 in. approx. = 0.50 in. water.

Snow Melt

at 10:30 am. snow wet and soggy

* Trip with Todd
and friends to me.

7:15 pm Shelter Outdoors
M R
3 1/2" 34

New Snow now dry
Old snow firm and
freezing, tho still can be
balled with effort.

But slush still soft and
improves where 1 in deep.
Water releasing heat slowly.

But end has come.
Snow falling again.
Heavily down.

Putting apparatus away.

Sheet somewhat wet from
new snow.

Snowballs between sheets
almost water-soaked.

White jacket somewhat
wet and freezing from
lying on the snow.

Slush is slushy.

Snowfall turned on heavily
again. "You always bring
snow". Ski teacher says "of
course" to all my observations.

Soda Offs Station

March 29, 1942 with
Eric Mack:

Batteries 15 volts but
only 2 amperes.

Need again.

Temp. 11 a.m. 50°F. calm

Faint shadows.

Snow just becoming
wet. On basket bed
snow nearly subwet.

12 Noon:

Below 6000 ft. snow
coarse. Can be packed
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pipe-stem tube. All 5 1/2 in. deep,
broad and narrow.

Watch this growth.

all day snow frozen or only surface-
damp in shaded porch at front of hotel.

Sunday April 5* Precipitation

Soda Offs -

"On Friday night heavy rain and
snow"

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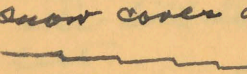
Snow Melt

at 10:30 am. snow wet and soggy

* Trip with Todd
and friends to me.

Snow in Trees.

Melting more than on surface of snow. The crystals at top, water in capillary suspensions at lowest point of cluster frequently melted into a pendant tail.

Snow retracted from twigs and branches because of refracted heat. (Similar retraction of new snow cover on roof  where angles gave opportunity for sun.)

Needles were merely a cushion for snow. Snow lay loose upon them. But in freezing weather the snow would probably adhere possibly by freezing and certainly

Soda Offg Station

Wch 29, 1942 with Eric Mack:

Batteries 15 volts but only 2 amperes. Head again. Temp. 11 a.m. 58°F. cal. faint shadows. Snow just becoming wet. On basket bed snow nearly awet.

12 Noon:

Below 6000ft. snow coarse. Can be packed into snowballs. Ice already melted at edge of pool and on surface. But snow melted only 1/2 in. down.

12 Noon. Below 6,000 ft. snow coarse. Can be packed into snowballs. Ice already melted at edge of pool and on surface. But snow melted only 1/2 in. down.

Radiation Effects

Pits caused by gravel thrown by snow-plow. Larger clumps of gravel make cone-pits. Individual pebbles sink directly down making only a pipe-stem tube. All 5 1/2 in. deep, broad and narrow.

Watch this growth.

all day snow frozen or only surface-damp in shaded porch at front of hotel.

Sunday, April 5* Precipitation

Soda Offg -

"On Friday night heavy rain and snow"

"No daily measurement of precipitation for 10 days ('Curley' was here but sick). But total April 4 was 2.24 in. (probably since survey was made). April 5 snow 3 in. approx. = 0.50 in. water.

Snow Melt

at 10:30 am. snow wet and soggy

* Trip with Todd and friends to ski.

by snow cohesion around needles and twigs.

Thus snow adheres longer to trees during cold and cloudy weather, but falls quickly in sunlight.

Dry snow may spill off the branches by loss of equilibrium by overload or wind-shaking.

Today trees on N. exposure high up on ski-hill hold their snow best.

Photos of last Sunday merely show greater melting and pitting ground.

Instruments etc. Andy and I packed up the recorder, pens, gage. Slt-screw nut had been screwed off. Possibly the _____ and the _____

Soda Gage Station

March 29, 1942 with Tomie Macke:

Batteries 15 volts but only 2 amperes. Recharged again. Temp. 11 a.m. 58°F. Calm. Faint shadows. Snow just becoming wet. On hatched trail snow nearly subwet.

12 Noon: Below 6000ft. snow coarse. Can be packed into snowballs. Ice already melted at edge of pool and on surface. But snow melted only 1/2 in. down.

12 Noon. Below 6,000 ft. snow coarse. Can be packed into snowballs. Ice already melted at edge of pool and on surface. But snow melted only 1/2 in. down.

Radiation Effects

Pits caused by gravel thrown by snow-plow. Larger clumps of gravel make cone-pits. Individual pebbles sink directly down making only a pipe-stem tube. All 5 1/2 in. deep, broad and narrow.

Watch this growth.

All day snow frozen or only surface-damp in shaded porch at front of hotel.

Sunday, April 5* Precipitation

Soda Springs - On Friday night heavy rain and snow

" No daily measurement of precipitation for 10 days ('Curley' was here but sick). But total April 4 was 2.24 in. (probably since survey was made). April 5 snow 3 in. approx. = 0.50 in. water.

Snow Melt

at 10:30 am. snow wet and soggy

* Trip with Tom and friends to ski.

Rent -7-
Today

may show entire catch since last sheet was removed. Ask Tony Palos.

Showed Andy how to read the max. Showed him last week how to read the minimum.

Major Bowie has written - but better from now on.

- Need (1) another thermog.
- (2) thermometer without metal + ins sealed tube.
- (3) 2 in black or metal

from which to suspend flap of sheet to give ventilation in center

Sheet far better than wood. No reflection from white cloth. Even snowballs

Soda Gage Station

Mar 29, 1942 with Bowie Mack:

Batteries 15 volts but only 2 amperes. Read again.
Temp. 11 a.m. 50°F. calm. Faint shadows.
Snow just becoming wet. On basket bed snow nearly subwet.

12 Noon:

Below 6000 ft. snow coarse. Can be packed into snowballs. Ice already melted at edge of pool and on surface. But snow melted only 1/2 in. down.

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Radiation Effects

Pits caused by gravel thrown by snow-plow. Larger clumps of gravel make cone-pits. Individual pebbles sink directly down making only a pipe-stem tube. All 5 1/2 in. deep, broad and narrow.

Watch this growth.

all day snow frozen or only surface-damp in shaded porch at front of hotel.

Sunday, April 5* Precipitation

Soda Springs - On Friday night heavy rain and snow

" No daily measurement of precipitation for 10 days ('Curley' was here but sick). But total April 4 was 2.24 in. (probably since survey was made). April 5 snow 3 in. approx. = 0.50 in. water.

Snow Melt

at 10:30 a.m. snow wet and soggy

* Trip with Toled and friends to mtn.

placed between two layers of muslin to hold them together left no moisture on under layer.

Funnels in snow probably buried from sight.

Depth of snow at store 6 1/2 ft.

Next time cut trench.

→ Monte Papet re markers

Need 2 anemometers

1 sling psychrometer or at least wet bulb thermometer

Soda Offg Station

Wet 29, 1942 with some Mack:

Batteries 15 volts but only 2 amperes. Read again.

Temp. 11 a.m. 50°F. calg faint shadows.

Snow just becoming wet. On basket bed snow nearly sub wet.

12 Noon:

Below 6000 ft. snow coarse. Can be packed into snowballs. Ice already melted at edge of pool and on surface. But snow melted only 1/2 in. down.

12 Noon. Below 6,000 ft. snow coarse. Can be packed into snowballs. Ice already melted at edge of pool and on surface. But snow melted only 1/2 in. down.

Radiation Effects

Pits caused by gravel thrown by snow-plow. Larger clumps of gravel make cone-pits. Individual pebbles sink directly down making only a pipe-stem tube. All 5 1/2 in. deep, broad and narrow.

Watch this growth.

all day snow frozen or only surface-damp in shaded porch at front of hotel.

Sunday, April 5* Precipitation

Soda Offg^{ing} - "On Friday night heavy rain and snow"

"No daily measurement of precipitation for 10 days ('Curley' was here but sick). But total April 4 was 2.24 in. (probably since survey was made). April 5 snow 3 in. approx. = 0.50 in. water.

Snow Melt

at 10:30 am. snow wet and soggy

* Trip with Toled and friends to mtn.

placed between two layers of muslin to hold them apart left no moisture in under layer.

Funnels in snow probably buried from sight.

Depth of snow at store 6 1/2 ft.

Next time cut trench.

→ Write Paper re markers

Need 2 anemometers
1 sling psychrometer
or at least wet bulb thermometer

Soda Offg Station

Wch 29, 1942 with
Lena Mack:

Batteries 15 volts but only 2 amperes. Read again.

Temp. 11 a.m. 50°F. calm faint shadows.

Snow just becoming wet. On basket bed snow nearly subwet.

12 Noon:

Below 6000 ft. snow coarse. Can be packed into snowballs. Ice already melted at edge of pool and on surface. But snow melted only 1/2 in. down.

12 Noon. Below 6,000 ft. snow coarse. Can be packed into snowballs. Ice already melted at edge of pool and on surface. But snow melted only 1/2 in. down.

Radiation Effects

Pits caused by gravel thrown by snow-plow. Larger clumps of gravel make cone-pits. Individual pebbles sink directly down making only a pipe-stem tube. All 5 1/2 in. deep, broad and narrow.

Watch this growth.

all day snow frozen or only surface-damp in shaded porch at front of hotel.

Sunday, April 5* Precipitation

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" No daily measurement of precipitation for 10 days ('Curley' was here but sick). But total April 4 was 2.24 in. (probably since survey was made). April 5 snow 3 in. approx. = 0.50 in. water.

Snow Melt

at 10:30 a.m. snow wet and soggy

* Trip with Todd and friends to me.

Need 2 anemometers
1 sling psychrometer
or at least wet bulb
thermometer

Wch. 29. Soda Spgs.

- 2 -

Pits caused by gravel
thrown by snow-plow.
Larger clumps of gravel
make cone pits.
Individual pebbles sink
directly down making
only a pipe-stem tube.
All $5\frac{1}{2}$ in. deep,
broad and narrow.
Watch this growth.

12 Noon. Below 6,000 ft. snow
course. Can be packed into snowballs.
Ice already melted at edge of pool
and on surface. But snow melted
only $\frac{1}{2}$ in. down.

Radiation Effects

Pits caused by gravel thrown by
snow-plow. Larger clumps of gravel
make cone-pits. Individual pebbles
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pipe-stem tube. All $5\frac{1}{2}$ in. deep,
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Watch this growth.

all day snow frozen or only surface-
damp in shaded porch at front of hotel.

Sunday, April 5th Precipitation

Soda Springs

On Friday night heavy rain and
snow

"No daily measurement of precipitation
for 10 days ('Curley' was here but sick).
But total April 4 was 2.24 in. (probably
since survey was made). April 5 snow
3 in. approx. = 0.50 in. water.

Snow Melt

at 10:30 am. snow wet and soggy

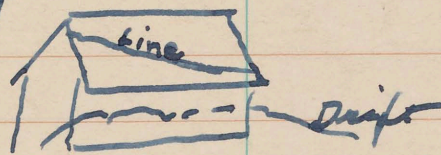
* Trip with Todd
and friends to one.

beneath new snow, and new
snow moist.

at 11:30 am new snow met enough
to make good balls.

At Donner Summit only 2 miles of packed
thin snow on road.

Breaking clouds over Donner Lake
like clouds at long camp on Mount Whitney.
An Office at Donner Hotel snow slid unevenly
on roof.



One of the boys took two pictures for me
with Brownie camera.