




**TRU-LINE**

WIRE-©



STENOGRAPHIC NOTES



No. 8

From July 13 1943

To October 31 1943

No. 18-G

|       |      |       |       |        |                  |
|-------|------|-------|-------|--------|------------------|
| No 1  | No 2 | No 3  | No 4  | No 5   | No 6             |
| 43.05 |      | 47.38 | 45.14 | 48.33  | 48.76            |
|       |      | + 2.9 | + 2.2 |        | + 1.56           |
|       |      | 47.66 | 45.42 |        | 50.32            |
|       |      |       | No 7  | No 8   | No 9             |
|       |      |       | 46.85 | 40.9   | 48.32            |
|       |      |       |       | + 1.86 | + 9.58           |
|       |      |       |       | 47.05  | 1.86             |
|       |      |       |       |        | 50.18            |
|       |      |       |       |        | 51.44            |
|       |      |       |       |        | 1.86 (acc. 1.00) |
|       |      |       |       |        | 48.91            |

Dec. 1 - June 10  
 adjusted 43.05 - 47.66 45.42 48.33 50.32 47.05 42.67 50.18 51.44  
 1943  
 Ten years at Soda Springs

Weather Record (cont.)

|            |          |         |  |      |        |
|------------|----------|---------|--|------|--------|
| July 1     | 65       | 40      | showers<br>1 hr 0.05                             | SE   | pt cly |
|            |          |         | No. 1 318 mi.                                    |      |        |
|            |          |         | No. 2 83 mi                                      |      |        |
| " 2        | 63       | 37      | begin in night.<br>ended 3 hrs<br>6 times 1-4 pm | 0.30 | SE cly |
|            |          |         | 382  |      |        |
|            |          |         | 174  |      |        |
| " 3        | 63       | 40      |  |      | SE cl  |
|            |          |         | 462  |      |        |
|            |          |         | 280  |      |        |
| Conditions | max 71°F | min 27° | Reset 57°F                                       |      |        |
|            |          |         | 56°  |      |        |
| " 4        | 72       | 35      |  |      | ? cl   |
|            |          |         | 566  |      |        |
|            |          |         | 391  |      |        |
| " 5        | 73       | 41      |  | SE   | cl     |
|            |          |         | 646  |      |        |
|            |          |         | 485  |      |        |
| " 6        | 73       | 40      |  | SE   | cl     |
|            |          |         | 727  |      |        |
|            |          |         | 581  |      |        |

|        |    |    |                         |       |
|--------|----|----|-------------------------|-------|
| July 7 | 75 | 38 | 800<br>690              | SE ch |
| " 8    | 73 | 38 | 886<br>798              | E ch  |
| " 9    | 72 | 38 | 985<br>902              | SW ch |
| " 10   | 75 | 41 | 41, 67<br>2 2           | SE ch |
| " 11   | 75 | 40 | 155<br>104              | SE ch |
| " 12   | 73 | 41 | 240                     | SE ch |
|        |    |    | New page<br>(4.5.12) 40 |       |
| " 13   | 77 | 52 | 356<br>175              | SE ch |
| " 14   | 75 | 42 | 425<br>265              | NW ch |

July 15 70 38 SE cl  
81 509  
82 359

" 16 73 38 SE cl  
603  
461

" 17 79 46 Thunder shower SE Pt cldy  
4 pm T  
695  
561

Pasture Max 77 Part 77  
Min 38 " 76

" 18 78 44 NW cl  
772  
662

" 19 76 46 SE Pt cldy  
847  
781

" 20 74 44 0.14 SE cldy  
907  
800

" 21 76 44 SE Pt cldy  
992  
888



July 22      69      41  
                    67  
                    968

E ch

" 23      74      44  
                    182  
                    46

SE ch

" 24      76      44  
                    187  
                    105

SE ch

" 25      77      45  
                    271  
                    190

E ch

" 26      81      44  
                    254  
                    288

SE ch

Sunday July 25

To Soda Springs by Burlington

Bus: Lv. Bus 11:55 am

→ Only a few <sup>Small Cakes</sup> small boxes of snow  
above Sugar Bowl.

Cardman said that he would  
stop at Soda Springs Hotel (Army Post)  
and take me to Beacon Hill.

#### Instruments

2 pm all instruments in post office  
working well but sunshine recorder  
column is scarcely at contacts.

#### Height of Sages

No. 2. Stevens N Spd 11.85 in.

No. 3 Army " 14.60 in

No. 4 W 9.13 (20.13) in.

No. 6 W 8.15 (19.15)

One wire line missing.

No. 7 W 7.01 in.

Sun barrel almost  $\frac{1}{2}$  full

→ Need new weather strips. These  
are warped and loose. Check on?

No. 8 W 7.670 in.

Trestle must be painted. Marking.

### Stevens Wind Shield

<sup>of</sup>  
<sub>chain</sub> An upper ring staples bent. Pass  
the chain, then the slats, then  
ends are bent on inside of slats.

Below is second chain. Outings  
pass thru slats from inside, then  
thru the chain, then the ends are  
spread.

#### Lease of Pasture

See Dennis James re lease of  
Pasture - right of entry and site of  
timber and timber only.

#### Reports

Column of minimum therm. broken.  
H-T pens not released <sup>into</sup> <sub>the</sub> slat  
less one day.

No. 9 WTS 9.15 (20.15)<sup>min</sup>  
Guy wire left unhooked.

No. 10. WTS 9.28 (20.28)<sup>min</sup>

One live missing for snap to hook into  
→ Note - Gain since July 10... 0.15". Receipt July 20... 0.14"

#### Triple Register

5 pm. Cavillard  
" Min. therm. bad.  
Siedentopf and another here

to recheck the log and test  
the triple register. Batteries low.

Stevens - Rankin - Linsley

5:30 pm. Stevens, Rankin, and Linsley  
arrived with replacements for  
Stevens K.

Planned for tables and data

all spent the night in housewiping  
cabin at Danner Summit Lodge.

Cause of Limbing Discovered

Stevens believes that temperature  
rather than precipitation is the  
cause of the irregular movement  
of the pen - caused by the differential  
in expansion or contraction of the  
aluminum and steel of which the  
outer case and weigh beam are  
made.

At least, the aberration of the  
pen occurs mainly at night, as  
shown by analysis of original and  
supplemental sheets. Fortunately the  
few dates put in the record afforded  
a starting point for segregating the



→ trace by day and night and hours.  
→ We shall therefore insulate the case in woolen blankets for a prolonged test.

We seem to have a che too we have been able to start and remove motor by swinging the large door open and shut.

Monday, July 26.

Cool morning - No cold shower.

Sunshine Recorder

Retested by Linky.

Stress II

Depth of solution without rubbers

11.4 in.

Cables:- In reassembling mechanism, one cable was broken - then another and now a third or a fourth.

all were single cables used last season.

→ The double cables did not break or pull out, but there were not enough of them for full substitution.

Trip Counterparts:-

a very ingenious trip might have been designed by Mr. Range at the

\* This is an automatic extension  
of the supplemental counterpane weight  
designed by Eric Olson, from the need  
to continue registration after water has

right end of the weighbeam that  
falls upon the beam when touched  
by the traveling balance-weight and  
depresses it, causing the latter to  
travel back to the left end of the  
weighbeam before the beam can  
regain equilibrium.\*

The traveling balance-weight  
then begins its recording run  
and can traverse the entire length  
of the beam before reaching its limit.

Since the weighbeam has <sup>original</sup> capacity  
of 40 in., the double traverse by  
the balance-weight provides a  
double capacity of 80 in. precipitation  
except for the weight of the water  
and oil in the initial charge.  
But, I believe, that even this has  
been balanced out in setting the  
recorder.

The reservoir seems capable  
of holding over more than 120 in.  
of precipitation in water equivalent  
or rather content. It could not  
hold so much probably in dry  
snow.

While the insulation of the reservoir  
retards melting after the contents have

once been frozen, the presence of liquid solution at its beginning and end of the season will absorb much of the snow. In the first open winter of 144 percent of annual precipitation, no snow accumulation at all of consequence built up in the reservoir.

Noon -

Batteries - Called Eric Hearn to assist in re-wiring Boarder #1. Will come up.

Batteries -

Batteries of H

Mr. Newcombe, representing Thomas A. Edison Co. arrived at lunch to check the "King Tut" cells.

Not difficult to open them up. May help.

32 - Small cells: 24 amps (Stevens),  
26.2 (Newcombe).

17 - Large cells: 15 amps (Newcombe),  
13 (Stevens), but 7.7 volts.

$7\frac{1}{2}$  volts sufficient for heating cellar.  
all cells alive and perfect, but <sup>in small batteries</sup> zincs, beginning to grow thin. Not recommended for October to May.\*

But it will be feasible, in case <sup>of failure</sup> the batteries fail, to connect a new series above the snow in a separate unit in a separate case,

\* But the large cells will last another year.

Stinson H

15-min. record and heat  
current eliminated. So  
circuit should be continuous.

for Mr. Newcomb declares that  
the primary cells will work in  
low temperature.

Batteries in low temperature

at Death J. -67°F, Edison cells  
used by the Southern Pacific ran  
without failure. 50 meas. recording  
thermometers -50 to +20 in  
Nevada - Wyoming. Not a failure.

On Great Northern, battery wells  
6 ft. deep with loose concrete cover  
for entry from above.

Records available. Will be sent  
by Mr. Newcomb.

→ Mr. Newcomb suggests for Soda Springs  
a battery cabinet with door -  
little batteries above, big batteries  
below, all visible by merely opening  
the door.

Continuous Record -

Since the capacity of the cells  
is sufficient to provide a continuous  
record instead of a record of  
accumulation each 15-minute period,

The more and brass contacts have been thrown open. This places Stevens II in a class with Stevens Q and Tracy as a recorder of about period intensity of precipitation unless the scale is too small.

Ernie Mass arrived soon after Mr. Newcomb's departure for San Francisco. Kires ultimately reconnected. A spread-contact was discovered after long search and perfect coordination and response was obtained.

#### H-T Record Sheets

Linsley will send

40 - 1074b (+10° to 110°F) for summer.

80 - 1074c (-10° to 80°F) for winter.

These appear to be the Forest Fire Service sheets. Must avoid this confusion hereafter.

Lindley would demand the 10 mi. mass, velocity  
 in January for the Canyon 35 mi., Dinosaur Summit  
 10 mi., takes 50 mi. to 70 mi. for wind shelter  
 measured over on the trig. tower.

Quartz? Was the wind really vertical  
 there, reflected from heliograph by Hotel?  
 Wind SW.

Weighing Stage 3. Army Engineers  
 "U.S.E.D. Seasonal Stage"

5:30 pm.

Separate Weighings

Gross Wt. in. Com, etc. in.

|              |                     |
|--------------|---------------------|
| 12.55        | - .24 dry           |
| 17.81        | - .26 wet           |
| 17.13        | + .03 spilled - .26 |
| 17.59        | - .26               |
| 12.20        | - .26               |
| <u>77.31</u> | <u>- 1.28</u>       |
| - 1.28       |                     |

Total 76.03

Change Dec. 9, 1942 28.65

Net accum. 47.38

Depth on stick 14.6 in. = ?  $69.5 \times 1.01545 = 70.57$  in.

Discussions at Lodge

Lindley wanted MS sent to Washington  
 by suggested a quality column in  
 Colometry. This was possible when  
 we all agreed that my "Colores per inch"  
 were rather "Colores per gram".

He prefers the heavier method of  
 Wilson rather than the balance.  
 Lighter to carry and handle.

Paulson wanted complete table of precip.  
 and offered to make us daily copies.

Tuesday, July 27

Recharging Seasonal Gages

No. 3 "U.S.E.D. Seasonal Gage". Eginawa.

Calcium chloride 30% intensity.

1. Water on scale 5.71 in.

Water and chloride 11.70 = 12.98 in

[Dead weight - 1.28 in]

[6 in. chloride]  
[7 in. water]

Case by George Hayes

→ Need another spec of calcium chloride.  
This one is being kept.

2. Water . . . 5.81 in

Water and chloride 11.50 = 12.77 in

Barret - 1.27 in

3. Water and chloride 2.48

Water and chloride and oil 2.65

Barret - 1.26

Oil Transil Oil

No. 20 - light

Possibly No. 30 medium

Total 29.66 in. WC

" 4.45 in. Dpt

No. 2. Stones W.

1. Can and water . . . 5.92<sup>in</sup>  
" water and chloride 12.0 = 13.27

2. Can and water . . . 6.85  
" and water and chloride 14.05 = 15.32

3. Bucket and water - 0.24

" " " + 0.64

" and water and oil 1.03

Bucket - 1.27 2.30

Total wt 30.89<sup>in</sup>

" depth 4.8<sup>in</sup>

Mess. by Joseph B. Paulson Jr.  
Water Resources Division  
Hydrology Section  
U.S. Engineers Office  
Sacramento, California.

Counterweight measured on bar of W.

→ Bucket (rather quilt) and canvas  
were wrapped and tied about the  
base of W W reduce insulation,  
for a bit of elevation of the pan  
had appeared during the night.  
This is an mystery. Can it be  
differential temperature?



43

|      |       |
|------|-------|
| July | .39   |
| Aug  | 0     |
| Sept | 0     |
| Oct  | 2.64  |
| Nov  | 1.94  |
| Dec  | 2.44  |
| 1944 |       |
| Jan  | 6.63  |
| Feb  | 7.68  |
| Mar  | 3.61  |
| Apr  | 4.39  |
| May  | 2.39  |
| June | 1.72  |
| July | 1.04  |
| avg  | 0     |
|      | 34.87 |

Norm 44.93  
Annual

Sold  
Springs  
U.S.W.B.  
Precip

Precip. No. 1. Cadam Springs

|                 |       |
|-----------------|-------|
| July 1943       | 0.39  |
| Aug             | 0     |
| Sept            | 0     |
| Oct             | 2.64  |
| Nov             | 1.94  |
| Dec             | 2.44  |
| 1944            |       |
| Jan             | 6.63  |
| Feb             | 7.68  |
| Mar             | 3.61  |
| Apr             | 4.39  |
| May             | 2.39  |
| June            | 1.72  |
| July            | 1.04  |
| avg             | 0     |
|                 | 34.87 |
| W.B. Am. Normal | 44.93 |

No. 7. Stevens Q.

attempted to replace the western guyline pulled from its stump but found a cable stretcher necessary. Cuillard agreed to provide the apparatus later. Should obtain railway spires to hold coil on the stump.

Proposed a ladder to reach the crane nest.

The weather strips are warping worse. Stevens wanted to cut them all off, but they help to keep the case weather tight.

Need overflow can. Cannot

→ Mr. Range develop one?

→ Record sheet out on drum June 1.

Finally agreed to leave it for a 3-month run if lines do not become too confused. With even light precipitation, the lines can be kept distinct and even 4 or 5 turns of the drum can be allowed, provided the capacity of the can is not exceeded.

Lunch and 3 pm. party. I caught the 2:30 bus.

Finally had time to go to  
Take a camp. He could take  
some time. Henry but want to  
leave the Cuillard and Stevens.  
I should expect to see Western

Note - One of legs No. 1  
Case should be  
cut at will likely for  
reference.

Monday August 16.

Called Quillard by phone to examine Station Q to see if the trace was still legible and the ink still <sup>legible</sup> ~~legible~~ <sup>good</sup>. Also to weigh the cans Nos. 4, 6, 8, 9, and 10 if precipitation threatened.

He reported that the graph was still fairly legible and ink was still in the pen. But that he had replenished the ink - just a little.

How little? This breaks the accurate continuity of the pen.

Tuesday, August 31.

Had been trying to obtain from Tahoe City replacements for the batteries of the Triple Register from Thomas A. Edison Co. The sunshine pen was failing to record - the first element to fail as batteries wear. Barnes did not believe that he could obtain priorities.

Can be had but require AA-1 priority. Called Quillard to measure

calls for exact specifications.

The Chief of the Weather Bureau has offered cooperation for another year.

### Tree House to Soda Springs

Rode mail truck with Bert Hutton to Tahoe City. He drove slow to stop. Tires worse than previous ride.

Kathleen Stewart, Bob Anderson's stepdaughter at Tahoe City, and former graduate of Nevada, was an expert in skiing. I promised her "Snow Sport and Transport".

"Tahoe not so excellent as Squaw Valley for skiing, for snow melts too quickly. Hard powder snow on firm bottom. 10 in. powder best but requires more skill in turning."

The bare surface may nullify the cold and accelerate melting. Compare  
→ the temperature - mean, day, min. - of Tahoe and Truckee or even Soda Springs.

One trip to Truckee (15 miles) only 25¢ or 45¢ round.

Coyote ride from Traveres to  
Danner Summit Lodge with Paul Harboe:  
"Danner face smooth as a mirror  
until noon today" - and last night  
rough at Tahoe and some haze  
this morning.

News at Soda Springs Hotel

Entire M.P. Battalion seems to be  
going to Salt Lake City for training for  
overseas M.P. service in joining Italy  
and a Utah battalion will come to  
Calaveras area. Probably before snowfall.

So I must present my case over  
again. I could bring my cat and  
sleeping bag had with from Tree House.

Arthur Guillard in San Francisco.  
Went out. Went for change. May be  
back tomorrow.

Wednesday, September 1.  
Weather Record

|         |    |            |    |    |
|---------|----|------------|----|----|
| July 27 | 83 | 44         | SE | ch |
|         |    | No. 1, 424 |    |    |
|         |    | No. 2, 370 |    |    |
| .. 28   | 82 | 50         | SE | ch |
|         |    | 505        |    |    |
|         |    | 451        |    |    |

|         |    |           |    |    |
|---------|----|-----------|----|----|
| July 29 | 85 | 47        | SE | cl |
|         |    | No. 1 585 |    |    |
|         |    | No. 2 532 |    |    |
| " 30    | 82 | 50        | SE | cl |
|         |    | 663       |    |    |
|         |    | 628       |    |    |
| " 31    | 81 | 42        | SE | cl |
|         |    | 741       |    |    |
|         |    | 734       |    |    |

Note. — This season the winter H-T sheets might have served, for 85°F appears to be the maximum.

|          |    |     |    |    |
|----------|----|-----|----|----|
| August 1 | 78 | 45  | SE | cl |
|          |    | 841 |    |    |
|          |    | 836 |    |    |
| " 2      | 73 | 39  | SE | cl |
|          |    | 936 |    |    |
|          |    | 933 |    |    |
| " 3      | 70 | 37  | SE | cl |
|          |    | 31  |    |    |
|          |    | 29  |    |    |
| " 4      | 67 | 45  |    | cl |
|          |    | 144 |    |    |
|          |    | 164 |    |    |

|           |    |            |   |    |    |
|-----------|----|------------|---|----|----|
| August 5  | 68 | 43         |   | NW | ch |
|           |    | 224        |   |    |    |
|           |    | 270        |   |    |    |
| " 6       | 68 | 38         |   | NW | ch |
|           |    | 311        |   |    |    |
|           |    | 371        |   |    |    |
| " 7       | 69 | 37         |   | NW | ch |
|           |    | 381        |   |    |    |
|           |    | 471        |   |    |    |
| Max. 82°F |    | Point 58°F |   |    |    |
| Min. 35°F |    | " 56°F     |   |    |    |
| " 8       | 72 | 35         |   | NW | ch |
|           |    | 464        |   |    |    |
|           |    | 563        |   |    |    |
| " 9       | 73 | 36         | 0 | NW | ch |
|           |    | 550        |   |    |    |
|           |    | 661        |   |    |    |
| " 10      | 73 | 35         |   | N  | ch |
|           |    | 632        |   |    |    |
|           |    | 743        |   |    |    |
| " 11      | 76 | 35         |   | NW | ch |
|           |    | 711        |   |    |    |
|           |    | 824        |   |    |    |

August 12 80 43 NW ch  
798  
717

" 13 81 45 NW ch  
860  
790

4 pm Max. 80°F Reset 78°F  
Min. 33°F " 77°F

" 14 80 48 NW ch  
940  
77

" 15 76 45 ch  
22  
155

" 16 76 40 NW ch  
192  
236

" 17 76 38 NW ch  
178  
316

" 18 73 37 NW ch  
258  
408

|           |    |     |    |    |
|-----------|----|-----|----|----|
| August 19 | 70 | 40  | NW | cb |
|           |    | 346 |    |    |
|           |    | 502 |    |    |

|      |    |     |    |    |
|------|----|-----|----|----|
| " 20 | 67 | —   | NW | cb |
|      |    | 411 |    |    |
|      |    | 585 |    |    |

Max. 78°F Pasture 65°F  
Min 32°F " 63°F

|      |    |                 |    |    |
|------|----|-----------------|----|----|
| " 21 | 66 | 34 <sup>4</sup> | NW | cb |
|      |    | 503             |    |    |
|      |    | 688             |    |    |

\* Note: - Pasture max. and min. not used?  
Hotel min. has column broken

|      |    |     |    |    |
|------|----|-----|----|----|
| " 22 | 64 | 30  | NW | cb |
|      |    | 582 |    |    |
|      |    | 785 |    |    |

|      |    |     |    |    |
|------|----|-----|----|----|
| " 23 | 63 | 36  | SE | cb |
|      |    | 661 |    |    |
|      |    | 888 |    |    |

|      |    |     |    |    |
|------|----|-----|----|----|
| " 24 | 60 | 31  | SE | cb |
|      |    | 741 |    |    |
|      |    | 961 |    |    |



|           |    |     |    |    |
|-----------|----|-----|----|----|
| August 25 | 69 | 35  | SE | ch |
|           |    | 833 |    |    |
|           |    | 70  |    |    |
| " 26      | 68 | 34  | E  | ch |
|           |    | 908 |    |    |
|           |    | 151 |    |    |
| " 27      | 73 | 36  | E  | ch |
|           |    | 995 |    |    |
|           |    | 231 |    |    |
| " 28      | 72 | 36  | SE | ch |
|           |    | 98  |    |    |
|           |    | 343 |    |    |
| " 29      | 62 | 41  | NW | ch |
|           |    | 200 |    |    |
|           |    | 456 |    |    |
| " 30      | 62 | 41  | NE | ch |
|           |    | 359 |    |    |
|           |    | 629 |    |    |
| " 31      | 64 | 43  | W  | ch |
|           |    | 524 |    |    |
|           |    | 802 |    |    |

Note. - Increase in wind Aug. 30-31.

Instruments  
9:55 am. One of triple register out  
of slot. Reset.

Barograph O.K. and on time.

10:15 am. Sunshine recorder just  
at contacts. Sun 70° high.  
Pleasant cool breeze.

Paint

→ Need to paint everything the way  
as here as last year.

Minimum Repaired

Minimum column broken in two places  
about 15" apart. Followed Dingley's  
method of tapping. As usual, bolt down.

Welding completed at 10:55 am  
Automatic tapper or wood pecker  
cheaper. Salary high.

Reset max. and min. 70°F.

Work

Feel normal again in this open.  
Flowers below - Spanish fingers (red),  
Slate daisies, yellow red, fine weed.  
Cool invigorating air on body and face.

Hotel

H-T Humidity

11:15 am

|          |        |        |
|----------|--------|--------|
| Dry bulb | 70.2°F | 71.0°F |
| Wet -    | 48.8°F | 49.4°F |

Precip. Gages

No. 1 - Tested - half full of water. No leaves.  
Precip. noticed July 27 - was slow.

No. 2 - Stores Y.

→ Dpth 4.6" Recharged July 27.. 4.8"  
Loss 0.2"?

Does running.

Hot beam touched off leaves and response.

Record as far as could be viewed  
horizontal - was ruler-straight.

Possibly slight leftward bend from  
evaporation but could be slight.

In fact, not visible except in  
imagination

Were stores? Rehandled the  
case completely.

No. 3 Dpth 4.33" Recharged July 27.. 4.45"  
Loss 0.12"

Project - Weigh can with water and oil on delicate scales over sheet and log periods. To determine evaporation from oil.

Query: Is the oil on Nos 2 and 3 too thin? Comparative amount on Nos 2 and 3 and on the others?

No. 4 wt 9.12 (20.12)<sup>in</sup>; July 25 9.13<sup>in</sup>  
Loss 0.01<sup>in</sup>

### Painting

Red for rods of No. 4 and hardens.  
Cattlechip gray for No. 5 towers and No. 2 (Stevens II).  
White for platforms.

Metal - Improvements for fastenings of shields

Insulation - Why not make an insulated cover for Stevens II?  
It was cold at this altitude and shivers. Bed clothes solved the problem.

Flashlight - Have I one here?

- No. 5. Feby. Record 12:15pm
- Rimmed depressions? Hand photostat made for study.
  - Watch depression curves in all recorders. Do they harmonize? Do changes in pressure the cause?

#### Slope Wind?

This morning wind N. This noon SE. A mountain breeze?

#### Time Off

Lunch at 1 pm

Smeda, uncorking a series of beer bottles: "For me, myself, my shadow, and four others."

Mrs. Cuillard: "Then get a room to drink."

On way back to Soda Springs Hotel at 2 pm Tom Buchanan, Blair, and Hazous encounter me on their return from Dr. Hartman's funeral.

Offered to take me to Tree House on their way to Reno but I had a half day's more work to do.

"Finding things." Could have housed them all: one, Tom, in the big bed, another in the Monk's cell, and Blair under the stairs. But Tom must go to Elao tomorrow.

Phone from Kinifred: "Cases return to Tucson Sep. 8."

### Triple Register Batteries

Entry thru basement door behind post office.

8 cells, 6" wide and 8½" tall, cylindrical. Lids 6½" diam.

2 units or elements in each:

Central unit red porcelain below, white above (probably part of lid).

Central belt support missing electrical part.

Outer unit (hollow cylinder) around central zinc - one thickness - but has two supporting belts, one of them the other electrical part.

Zinc element about half corroded. Deposit (zinc) in

bottoms of each jar  $3\frac{1}{4}$  in. deep.  
Wooden cover considerably  
eroded by chemical action.

Ground in cellar dry. First time  
noticed. Due to summer drying out  
of soil with stoppage of runoff.

→ [ Letter from Edison Co. Sep 16 states that  
this type of jar takes their S-300  
Renewal. They will accept - priority  
of AA-2 for replacements, and are  
shipping out only the 8 sets of S-300  
renewals but 8 standard covers.

The other covers are the Waterbury  
Type]

Pasture - H-T  
3:45 pm Dry bulb 71.0°F } In shade on  
Wet " 51.0°F } sod.  
Min. on bottle 67°F  
H-T " " 70°F  
{ Max. Today 74.3°F  
Min. " 41.0°F

Guy

→ Guy found lightened by Conilland(?)  
why not lay in timber braces to  
stiffen truss?

Leak of Therm. Shelter

Leak of instrument shelter will not work.

→ Have it removed and repaired.

Precipitation Gauge

No. 8 Wet 7.66 (18.66)<sup>in</sup>, July 25, 7.67<sup>in</sup>  
Loss 0.01

No. 6 Wet 8.12 (19.12)<sup>in</sup>, July 25, 8.15<sup>in</sup>  
Loss 0.03<sup>in</sup>

No. 7 Stevens Q

Gauge tight. Rebalanced now (⊙)

Check night cable  $\frac{1}{2}$  an out.

Washed by Stevens July 27.

→ Ink barrel slightly more than one-half full by capillarity of its edge of ink.

Instrument rebalanced until bubble is exactly centered. (⊙)

Int. 1 - Reset at 6<sup>in</sup> at 3:45 pm

→ No refilling of pen. Wait until winter.

Ink started flowing with only slight movement of pen. That time it has been necessary to wax it.

Pen looks like burning-binder bear



and works as readily.

→ Bring cement glue to fasten down the leather strips of the door.

#### Down Slope Wind

Mountain breeze at noon?

No, rather strong upslope (W) breeze all afternoon.

Query: Is air from this western slope being sucked across the crest by the desert heat to the east?

→ Is afternoon breeze mainly from west? Sky full of cirrus (cirro-stratus).

#### Metal Can

How about metal band for drum of triple register? Rubber band in its place. Sent to Reno? No, in drawer, so took it with me.

No. 9 HT 9.15 (20.15)<sup>in</sup>; July 25, 9.15<sup>in</sup>.  
Loss 0  
Can 3 ft. deep.

No. 10 HT 9.27 (20.27)<sup>in</sup>; July 25, 9.25<sup>in</sup>.  
Loss 0.01<sup>in</sup>

Surface of liquid 20<sup>in</sup>. below rim. Can 3 ft. deep.

### Anemometer

Oil both anemometers - Hotel and Pasture.

4:50 pm.

Shined women at Arthur's bar  
to read thermometers, anemometer,  
etc.

Ever see the rubber flashlight  
to return to Mrs (Frances) Cuilland.  
Landed me to examine batteries.

Band quite tight around Stems 14.  
→ No time to take bar off of Pasture  
thermometer shelter. So asked her  
to ask Arthur to do so.

### Triple Register

No time to reset triple register  
for Arthur, apparently delayed in  
returning from S.F.

Somehow recorder column at

→ 4:30 pm just leaving contacts - but  
only straight line all day on triple  
register.

### Train

Half hour late. Still room to stand  
but increasingly less. Suit-case cuts  
at a premium.

Bone  
"Tropic Heat" instead of "Air Conditioned".  
Altitude makes the difference.

July 20<sup>th</sup> from Tulsa City to Conway.  
Next summer I shall ride north and  
make base.

Monday, September 6

Wesley, U.S.G.S. of Salt Lake City,  
brought Prof. Roy S. Mansell of Univ.  
of Utah to visit me at Tree House.

Wesley writing a report on Clark  
Cuesta in the Great Basin; Mansell is  
providing geologic background,  
latter is adviser on groundwater  
supplies for Salt Lake City. Will write  
a paper for A.G.U. on sources of  
groundwater affecting streamflow.

Causes Powder

at King's Beach found the sand  
about impalpable and apparently  
adapted for drying the glycerine wax  
or records providing the sand does  
not blow into the mechanism.

Mansell suggested Causes Powder  
Powder used by engineers

for drying their drawings and tracings. On Sep. 18, purchased a can of it for Soda Springs.

As I still want to try the iron-moulds "partly sunk".

### Evaporation

The losses in precipitation gauges July 25 to September 1 should be studied on basis of

1. Relative area of Nos 2 and 3 and 7 as compared with the single 8-in. cans.
2. Relative depth of Nos 2, 3, 7 and Nos 4, 5, 6, 8 and Nos 9 and 10.
3. Relative thickness of oil on Nos Nos 2, 3, 5, 7 as compared with Nos 4, 6, 8, 9, 10.

→ Test out oil density and depth as reducers of evaporation.

In case of occasional precipitation, caps could be placed over the gauges.

Saturday September 18.

Returned the Viny sheet received Sep. 1 and the metal base for triple register to Arthur Couillard.

Friday, October 1

Bus has changed time of departure from 7 to 8:30 a.m. I had get up at 5 a.m. Next time 6:30 a.m. will be sufficiently early, with more sleep. Hope the schedule is permanent.

Had a good rest. Was completing the circle tour from San Francisco to Phoenix, Arizona, Las Vegas, Reno and home.

Had traveled our route in 1923 and later had spent a winter on the Yukon in mining in deep snow.

Conference with Captain Buscham. Took him Human Side of Snow II, III, IV - two sets. He desired two more.

He has also set Sunday Oct 10 for showing his MP's the Swiss Arblanche film. Will ask Forest Service, Ogden for its English translation.

He believes that Colonel Hennessy will grant quarters and meals to Dr. Gendel and myself. Will obtain

a decision Tuesday.

11 a.m.

Stevens H (No. 2) still runs straight with present bedding. Responds quickly both up and down. Bar springs back promptly to neutral. Plenty of neutral space to avoid jittering. But will it respond to increments of .01" precip.?

H-T pens are on the bar. Do reset instruments for Covilland. He had changed date of chaining sheets to Friday but even so cannot always get away in the forenoon. No ink.

Lock in Pasture O.K. but minimum column broken again. Second time broken. Bolt in box had been thrown too far.

Dig to determine water table depth in Pastures

1 pm. Lunch at Pioneer Summit Lodge.  
Three bottles purple ink and  
6 measuring sticks from Fritz are  
here. Sticks \$1.25 each, Paula  
says that the Bureau pays over 65¢.  
The dropper points in the ink bottles  
are excellent.

One bottle each left at H-T's  
and barograph.

Olene & Winifred to request Anselma  
film from System and ask Walter King  
to bring his projector and Snow. Snow  
colored film.

An Army jeep helped replace gasoline  
on Stevens & tower. A.C. gave them  
two bags \$1.25 each. What a joy him.

Copied Weather Record appended.

3:15 pm Hotel.

Reset barograph. Bottle of ink left  
there.

H-T at Hotel moved. Bottle left there.

→ Get purple, red and green ink for  
the triple register.

### Presip. Sages

No. 1 - Dry

No. 2. Stems 11  
depth 4.60" diam. at liquid level 18"

No. 3 USED 4.50" diam. approx 18.2"

→ To prevent upward creep of oil, cap on dry measuring stem, dip the stem in the oil and then wipe clean before making the final measurement. Then the pores are filled and the liquid or oil line is smooth and regular on all faces of the stem.

Note - Collar of No. 3 clings badly against the can.

No. 4. HT 9.15 (30.15) → 9.09" in.  
Evidently read .05" off.

### Sunshine Recorder

over one inch below contacts  
almost one inch at noon.

→ Need another.

### Spun. Pasture

Max. for period 74°F, Best 68°F

Wires. Chum broken into 3 pieces.

Get new one. Twice repaired.

U.S. P. B. 400466.



→ also get new sunshine recorder,  
and low anemometer inspected  
at Hotel. " Too slow, only one-third  
as fast as in Portree for several  
days. Due to friction in triple  
register. Cailland.

No. 6 at 8.12 (19.12) -

No. 7. No loss whatever, the daily  
says in trace. Pen exactly on one line  
but  $\frac{1}{4}$  capacity. Cables  $\frac{1}{2}$  out.  
Diam. of bucket at liquid level 11"

→ " Only 2 drops from wells as cover  
put in the pen. Noticed  
that pen had sufficient for needs  
and so drilled - rather Cailland.  
This would not make a great  
difference in the duration of the  
ink supply. So test is still valid.

→ H.P. Beaman and A. Cailland tight-  
ened the gages and boiled  
the cable.

\* Met Mr and Mrs Dennis Jones near  
Pasture. They have signed the lease  
of the Pasture for the Snow Studies  
from 1946 at \$10 annually and  
\$10 for the past year of 1942-43.

But they have stipulated that no  
further construction be done on  
the lot. Really however, they have  
agreed that the tops of the flat forms  
can be extended but desire to discuss  
any other construction before making.

They particularly do not want more  
towers because of the destruction  
of the grass which at best is  
scanty. We may build a platform in the bushes.

I agreed promptly. They should  
receive larger compensation if more  
land is used. It may be necessary  
to use supports from ground to under trawls.

No. 8 WT 7.65<sup>±</sup> (18.65)<sup>±</sup>

No. 9 WT 9.13 (20.13)<sup>±</sup>

No. 10 WT 9.25 (20.25)<sup>±</sup>

Triple Register is reset each day by A. G.  
To regulate it, the all lines are straight.

Edison Co. promises delivery of  
refills for battery by Oct. 6-7.\*

5:30 pm. To talk with the Boardman.  
Saturday  
October 2.

On further thought must get  
the Stevens Q record for September  
unchanged for study. A second  
trace over the first night digit  
its diurnal range.

Must return Monday. My earliest  
chance.

Stevens W. Does it require to  
much weight to move the  
neighbor into contact with  
.01 in precip.? It snaps back  
into neutral very strongly.

Compute weight of  $\frac{1}{100}$  in. quarter

over an 8 in. circular area  
modified by the lower system  
supporting the reservoir and  
attached to the neighbor beam, and  
test sensitivity of recorder.  
Refer pulley to Stevens.

Also get a bucket for Q  
with ears for lifting for cross-  
net hole, and an overflow  
reservoir.

Later: Have sent details to Stevens.

Apparently Stevens W will not  
pump so much as the other  
types in the wind because of  
its broad neutral zone between  
→ contacts. This will be very  
valuable if radius recording is  
attached.

Monday October 14

Returned on 11:55 am. bus No. 3  
to Soda Springs.

1:30 am. changed sheet of Stevens Q  
and rewound cable of clock.

1:55 pm. Rerouted No. 4  
Ht. 9.09 in.

Too late for 2:00 pm bus No. 1 & 2,  
ignored by bus No. 2, and finally  
between Beacon Hill Lodge and  
Donner Summit Lodge by belated  
bus No. 3.

The old sergeant who calls me  
"Pop" and cares for the heating system  
of Cedar Springs Hotel told me that  
he engineered the tightening of the  
gaps of Stevens' and was  
planning the printing of the platens.  
He used two twenty-four inch gaskets  
for the purpose.

He agreed to drive a railroad  
spike into the stump above the  
loop of the cable to hold it down.  
I promised him 50¢ extra for this.

He has 1 gal. of paint that he  
will take over to Conillard. I  
explained that we could not  
hire soldiers for jobs beyond  
brief emergencies.

at Donner Summit Lodge, my

To the new Castlehorn Quartermaster  
in Alameda, California.

protest against buses brought me  
 a ride with the Evans, Forest Surveyor,  
 & Reno. He was a Michigan Forestry  
 graduate ten years after me.

So we had field trips to Filbert  
 Park and other Michigan woodlands  
 and discussed nature and beauty.

"The definition of art?" I suggested  
 "Satisfaction" was when a cut grows.

He has charge of the Conservation  
 Objectors.

at the office, I loaded him with  
 reprints. He is stationed at Durand  
 with 34 1/2 years service.

### Weather Record

| 1943   | Max     | Min     | Wind     | Clouds |
|--------|---------|---------|----------|--------|
| Sep. 1 | 74      | 41      | W        | Partly |
|        |         | No. 1   | 605 mi.  |        |
|        |         | No. 2   | 716 mi.  |        |
| " 2    | 73      | 37      | W        | cl     |
|        |         |         | 687      |        |
|        |         |         | 998      |        |
| " 3    | 77      | 45      | NW       | cl     |
|        |         |         | 781      |        |
|        | Max. 75 | Min. 43 | Reset 73 | 72     |
|        |         |         | 89       |        |

|        |    |             |    |         |
|--------|----|-------------|----|---------|
| Sep. 4 | 77 | 40          | NW | ch      |
|        |    | 862         |    |         |
|        |    | 189         |    |         |
| " 5    | 79 | 43          | W  | ch      |
|        |    | 958         |    |         |
|        |    | 291         |    |         |
| " 6    | 81 | 48          | NW | ch      |
|        |    | 42          |    |         |
|        |    | 370         |    |         |
| " 7    | 82 | 44          | NW | PT cldy |
| →      |    | 130 or 136? |    |         |
|        |    | 410         |    |         |
| " 8    | 82 | 45          | SE | PT cldy |
|        |    | 205         |    |         |
|        |    | 521         |    |         |
| " 9    | 78 | 49          | SE | ch      |
|        |    | 241         |    |         |
|        |    | 621         |    |         |
| " 10   | 72 | 40          | SW | ch      |
|        |    | 291         |    |         |
|        |    | 721         |    |         |

Max. 79      count 68  
 Min 39      "      67

|         |    |    |    |    |     |
|---------|----|----|----|----|-----|
| Sep. 11 | 70 | 35 | SW | cb |     |
|         |    |    |    |    | 386 |
|         |    |    |    |    | 819 |
| " 12    | 76 | 33 | NW | cb |     |
|         |    |    |    |    | 344 |
|         |    |    |    |    | 900 |
| " 13    | 77 | 39 | NW | cb |     |
|         |    |    |    |    | 362 |
|         |    |    |    |    | 793 |
| " 14    | 77 | 39 | NW | cb |     |
|         |    |    |    |    | 393 |
|         |    |    |    |    | 78  |
| " 15    | 73 | 38 | NW | cb |     |
|         |    |    |    |    | 416 |
|         |    |    |    |    | 165 |
| " 16    | 71 | 34 | NW | cb |     |
|         |    |    |    |    | 458 |
|         |    |    |    |    | 246 |
| " 17    | 67 | 35 | W  | cb |     |
|         |    |    |    |    | 535 |
|         |    |    |    |    | 336 |

Max 75      Count 64  
 Min 31      "      62



|         |    |     |    |         |
|---------|----|-----|----|---------|
| Sep. 18 | 72 | 31  | NW | cl      |
|         |    | 628 |    |         |
|         |    | 436 |    |         |
| " 19    | 73 | 43  | NW | cl      |
|         |    | 729 |    |         |
|         |    | 543 |    |         |
| " 20    | 78 | 40  | NW | cl      |
|         |    | 819 |    |         |
|         |    | 641 |    |         |
| " 21    | 80 | 43  | NW | cl      |
|         |    | 899 |    |         |
|         |    | 722 |    |         |
| " 22    | 78 | 41  | NW | cl      |
|         |    | 19  |    |         |
|         |    | 840 |    |         |
| " 23    | 81 | 49  | SW | pt cldy |
|         |    | 99  |    |         |
|         |    | 720 |    |         |
| " 24    | 77 | 42  | NW | pt cldy |
|         |    | 164 |    |         |
|         |    | 8   |    |         |

Max 79    Prev 69  
 Min 35    " 68



Sep. 25 70 47 NW ch  
232  
70

" 26 67 35 W ch  
319  
162

" 27 70 34 N ch  
371  
242

" 28 69 33 NW ch  
434  
311

" 29 73 36 NW ch  
501  
386

" 30 77 39 W ch  
580  
472

Precipitation Log. By Arthur Couillard

Sep. 24 - 4 to 4:30 pm., 1948.

Weight of Log

|                        |                    |
|------------------------|--------------------|
| # 8 . . .              | 7.65 <sup>in</sup> |
| # 6 . . .              | 8.11               |
| # 10 . . .             | 9.25               |
| # 9 . . .              | 9.13               |
| # 7 <sup>+</sup> . . . | 9.11               |

= Probably # 4?

October 7.

Because of visitors, Walter Berg can not go to Soda Springs Hotel Sunday evening. So Captain Burnham has set Wednesday, Oct 13 7<sup>pm</sup> as date.

The Ogan avalanche film has arrived. Special oil will be granted.

Tim Wilson will loan his projector and film too for emergency — and may show it there later in winter.

Other projectors (16<sup>mm</sup>) at Extension Service and Ernie Morris (his assistant owns it).

Total of 4: Walter Berg, Tim Wilson, Extension Service, Ernie Morris' assistant.

Evaporation from Prec. Gages  
August - September

1943

|                         | Depth or Weight - Inches    |                      |                            |                   | Evaporation - In. |                |                   |
|-------------------------|-----------------------------|----------------------|----------------------------|-------------------|-------------------|----------------|-------------------|
|                         | Sunday - Tues<br>July 25-27 | Wednesday<br>Sept. 1 | Friday<br>Sept. 24<br>A.C. | Friday<br>Oct 1   | Aug.              | Sept.          | Totals            |
| No. 1                   | 0                           | 0                    | 0                          | 0                 | 0                 | 0              | 0                 |
| No. 2 (W) <sup>ST</sup> | 4.8 <sup>(27)</sup>         | 4.6                  |                            | 4.6               | 0.2               | 0              | 0.2               |
| No. 3 (U.S.E.D.)        | 4.4 <sup>(27)</sup>         | 4.33 <sup>W</sup>    |                            | 4.5               | 0.12              | +0.17          | +0.05             |
| No. 4                   | 9.03                        | 9.12                 | 9.11                       | 9.09 <sup>+</sup> | 0.01              | 0.03           | 0.04              |
| No. 5 (Fax)             | 1.47                        | 1.43                 |                            | 1.43              | 0.04              | 0              | 0.04              |
| No. 6                   | 8.15                        | 8.12                 | 8.11                       | 8.12              | 0.03              | 0 <sup>+</sup> | 0.03 <sup>+</sup> |
| No. 7 (R)               | 7.01                        | 7.01                 |                            | 7.0               | 0                 | 0.01           | 0.01              |
| No. 8                   | 7.67                        | 7.66                 | 7.65                       | 7.65 <sup>+</sup> | 0.01              | 0.01           | 0.02              |
| No. 9                   | 9.15                        | 9.15                 | 9.13                       | 9.13              | 0                 | 0.02           | 0.02              |
| No. 10                  | 9.28 <sup>-</sup>           | 9.27                 | 9.25                       | 9.25              | 0.01              | 0.02           | 0.03 <sup>-</sup> |

No. 3 is apparently 4.33 in. means.  
Sept. 1 is a mistake.

No. 4 The wt Oct 1 was 9.15 in.  
Return Oct 4 - 9.09 in.

No. 1 - Depth daily by stick.

No. 2-3 Depth by stick; No. 2, also by graph.

No. 4, 6, 8, 9, 10 Depth by weight.

No. 5 and 7 Depth by graph.

Wednesday, October 27 Batteries

Called Caillard. Refillars for batteries arrived Monday.

at 2 pm left Reno with Eric Mack and Prof. Boardman for Soda Springs.

Tried to get distilled water at Chico's Creamery but finally borrowed a 5-gal. can there to carry mountain water in for charging batteries.

Snow on trees at Donner Summit. Cloud effects in the east.

Snow on south slope. Snow on ground this morning but now melted. Clouds rising in west.

### Refilling

Used highest water for batteries. Could enter basement from rear.

Required screwdriver and pencil to clean old jaws.

Filled to  $3\frac{1}{4}$  in. from rim. But old nuts  $3\frac{1}{16}$  in. All sergeant sent us to Hadden to Royal Pulpit, Capt. of Communications of S.P., who loaned us 8.  $1\frac{1}{2}$  in. nuts,

Can find a great room  
at Hotel but only 24 portions for  
24 men - must see Capt. Montgomery.

8 -  $\frac{14}{24}$  beer mugs, and 8 washers.  
To be ordered from Dixon via. and  
returned to him thru Conillard.

Dinner at Hotel by courtesy  
of our old sergeant and Lieut. King's.

Battery rooms - Each cell tested  
at 1 volt or total of 8 volts.

To Dawson Summit Lodge. Buy  
there "Henry" willing to paint platform  
1 gallon white and lead.

Rent 10 pm.

October 21 (Sunday)

Dr. Gendel, Mrs. Gendel and son Charles  
and two dogs stopped at noon on  
way to Sacramento. Both Kern brought  
them up to the Experiment Station.

Tore away after lunch at 2 pm.  
They stop at Auburn.

"I did all the talking and he was  
deaf". Will return to Soda Springs  
with the demand for general  
conference.

Meanwhile, he has been buying  
hisself in sweet love - enthusiastically.

### Weather Record

| 1943      | Max. | Min. | Precip.       | Wind  | Clouds     |
|-----------|------|------|---------------|-------|------------|
| October 1 | 73°  | 39°  |               | SW    | cl         |
|           |      |      | No. 1 664 mi. |       |            |
|           |      |      | " 2 569 mi.   |       |            |
| " 2       | 69   | 40   |               | NW    | cl         |
|           |      |      | 741           |       |            |
|           |      |      | 652           |       |            |
| " 3       | 70   | 33   |               | NW    | cl         |
|           |      |      | 820           |       |            |
|           |      |      | 738           |       |            |
| " 4       | 70   | 36   |               | NW    | cl         |
|           |      |      | 896           |       |            |
|           |      |      | 815           |       |            |
| " 5       | 71   | 34   |               | NW    | cl         |
|           |      |      | 986           |       |            |
|           |      |      | 915           |       |            |
| " 6       | 65   | 40   |               | SE Pt | cldy       |
|           |      |      | 82            |       |            |
|           |      |      | 21            |       |            |
| " 7       | 59   | 41   | 0.08 in.      | SW    | light rain |
|           |      |      | 206           |       |            |
|           |      |      | 181           |       |            |

|        | Max | Min | Precip. |  |          |
|--------|-----|-----|---------|--|----------|
| Oct 8. | 48  | 36  | 0.54    |  | SE Rainy |
|        |     |     | 263     |  |          |
|        |     |     | 252     |  |          |

Pasture  
 For period { Max 68 Past 42  
 Min 54 " 54 !

|        |    |    |      |  |        |
|--------|----|----|------|--|--------|
| Oct. 9 | 67 | 38 | 0.01 |  | NW Clr |
|        |    |    | 393  |  |        |
|        |    |    | 408  |  |        |

|      |    |    |     |  |              |
|------|----|----|-----|--|--------------|
| " 10 | 64 | 33 |     |  | NW Pt Cloudy |
|      |    |    | 480 |  |              |
|      |    |    | 497 |  |              |

|      |    |   |     |  |        |
|------|----|---|-----|--|--------|
| " 11 | 57 | — |     |  | SE Clr |
|      |    |   | 607 |  |        |
|      |    |   | 625 |  |        |

|      |    |    |     |  |       |
|------|----|----|-----|--|-------|
| " 12 | 69 | 35 |     |  | W Clr |
|      |    |    | 727 |  |       |
|      |    |    | 732 |  |       |

|      |    |    |     |  |       |
|------|----|----|-----|--|-------|
| " 13 | 69 | 33 |     |  | W Clr |
|      |    |    | 790 |  |       |
|      |    |    | 794 |  |       |

Oct 14 73 36 NW cl

864

867

" 15 69 37 W cl

951

954

Pasture

In Period.

Wet. 71

Rest

Wet. —

Oct. 16 65 38 NW cl

45

51

" 17 59 35 0.40 S.W. SW <sup>Snow</sup> <sub>on rain</sub>

Snow and rain  
Jan - 3 pm

146

156

" 18 38 "Koreachy" T <sub>Swamp</sub> SW Snowy

off and on  
12 noon

215

231



Oct 19 35 29 0.16 NW cldy  
Sunny 7hr  
285  
316

" 20 36 30 0.30 NW Slat  
off under ~~not~~  
all day rain  
349  
392

" 21 42 32 0.85 Slat 2in. NW P cldy  
468  
506

" 22 42 32 NW P cldy  
572  
547

Pasture  
For period Mar 44 Oct 42  
Mar 21 " 41

Oct 23 44 22 NW cldy  
568  
608

" 24 55 38 NW cldy  
640  
692

Summary of Precip.

Oct. 7 . . . 0.08 in.  
 " 8 0.54  
 " 9 0.01 0.63 in.  
 Oct 17 0.40  
 " 18 T  
 " 19 0.16  
 " 20 0.30  
 " 21 0.85 1.71

Oct. 27 0.19  
 " 29 0.05  
 " 30 0.06 0.30

Total for week 2.64 in

Oct 25 60 44 NE cldy  
 739  
 816

" 26 59 30 NW Pt cldy  
 835  
 937

" 27 46 32 0.19 snow 2 in. NW Pt cldy  
 890  
 998

" 28 45 25 SW Pt cldy  
 937  
 95

" 29 36 23 0.05 NW stormy  
 Rainy night  
 15  
 95

Barometer  
 " for period Max 56 Feet 34  
 Min 22 " 38

Oct 30 47 28 0.06 NW cl  
 Rainy night  
 47  
 170

" 31 46 22 SE cl  
 147  
 276