

From June 15 to September 1, 1938  
William and Margaret McCalla travelled  
4,852 miles through the Northwest  
United States collecting and  
photographing wildflowers. Each kept a  
journal. This is a record of their journey.

## William and Margaret McCalla: The 1938 Trip Through the Northwest United States

Compiled by Robert (Grandson) and Peggy  
McCalla, Halifax, NS

24 May 2017



## Acknowledgement

This compilation has been a labour of love; it's also been educational. However, we could not have done the work without the support of people who gave freely of their time and interest in the affairs of William and Margaret McCalla. To Dorothy Fabijan and Jocelyn Hall of the University of Alberta Vascular Plant Herbarium Museum where WCM's plant specimens are archived, thank you. Also, to Wayne Murdoch of the Provincial Archives of Alberta, many thanks for your encouragement and scans of lantern slide images. Our thanks are extended to Chantal Dussault and Laura Smyk of the Canadian Museum of Nature for your support in cataloguing the black and white images in the many volumes of WCM photographs in your possession and supplying selected images.

We are especially grateful to Donna Clandfield (granddaughter of WCM and MM) for supplying the original journals and Eric Stewart (great grandson of WCM and MM) for technical support and encouragement.

We acknowledge mistakes exist in the compilation. Not everything was easy to decipher from the handwriting; botany is not our expertise and Latin names were a challenge.

Let us end with the words of WCM when speaking to an evening group at Scarboro Church in Calgary on November 2, 1936:

“For three score years I have found pleasure and satisfaction in Outdoor Nature, and for almost two score of these years I have carried camera and note book on all my trips, short and long....Most people find some emotional pleasure in nature. Flowery meadows, the wind blowing over grasslands, light on water, the flash of wings, the song of birds – all give joy and spiritual uplift.”

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## PREFACE

William (Will) Copeland McCalla was born in St. Catharines, Ontario, Canada in 1872. Margaret Adam Ratcliffe was born in the same place in 1880. They married in 1902. He was a prosperous market gardener in the St. Catharines area until selling the farm in the winter of 1912-13 and taking up residence in Edmonton, Alberta. From an early age Will was interested in plants, flowers and photography. In 1899, for example, he made a collecting and photography trip to Banff, with free transportation provided by the CPR in exchange for photographs. In 1920 he published an illustrated book, *Wild Flowers of Western Canada* (Toronto: Mussen Book Co.) which was distributed to all public schools in Alberta. In 1925 he took up a teaching position at the Calgary Normal School where he remained until his retirement in 1938. Each summer, and often throughout the year, he and Margaret would take collecting and photography trips for wildflowers. Both kept journals of their trips: Will a photographic record and a specimen record of his collecting, with Margaret keeping the daily log. What follows is a compilation of their trip in 1938 to the Northwestern United States focussing on the National Parks of the area. The compilation combines Will's photographic record and Margaret's daily log<sup>1</sup>. In this compilation some of the photographs and specimens collected are shown, along with an indication of where they may be found today. Especially featured are the coloured hand painted lantern slides that were produced from some of the black and white photographs taken. Will's life work of collecting and photography may be found in various depositories:

- University of Alberta, Department of Biology Vascular Plant Herbarium Museum, Edmonton, Alberta  
<http://www.biology.museums.ualberta.ca/VascularPlantHerbarium.aspx>
  - Over 14,000 sheets of pressed wildflowers.
  - Yearly journals from 1936 to 1947 of plant collecting detailing date, location, type and description of plants collected that year.
  - Almost 1000 negatives, positives and glass plates of wildflower and landscape photographs.
- Public Archives of Alberta, Edmonton, Alberta <http://provincialarchives.alberta.ca/>  
 Over 500 hand coloured glass lantern slides of wildflowers and landscapes.
- Museum of Nature Archives in Gatineau, Quebec <http://www.nature.ca/en/home>  
 Twenty five albums of over 1400 black and white photographs of wildflowers and landscapes, of which only 14 albums can be found.
- University of Calgary, Department of Biology Herbarium  
<http://www.ucalgary.ca/herbarium/> Seven volumes of black and white wildflower and landscape photographs, plus about 350 sheets of pressed flowers.
- Whyte Museum of the Canadian Rockies, Banff, Alberta <http://www.whyte.org/>  
 Approximately 50 black and white glass slide negatives of landscapes.

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<sup>1</sup> See Appendix 2 for an example from each journal.

William was awarded an Honorary LL.D by the University of Alberta in 1956. He died in 1962; Margaret in 1964.

Figure 1: The Journey

Map Reference	Date	Location	Text Reference (page no.)
1	15 June 1938	Leave Calgary, Alberta	4
2	20 June 1938	Craters of the Moon National Monument	9
3	23 – 30 June 1938	Grand Teton National Park	11 - 24
4	10 – 17 July 1938	Crater Lake National Park	33 - 46
5	29 July – 18 August 1938	Mt. Rainier National Park (Longmire)	53 - 84
6	18 – 25 August 1938	Mt. Rainier National Park (Yakima – Sunrise)	84 - 94
7	25 – 29 August 1938	Portland, Oregon	95
1	1 September 1938	Return Calgary, Alberta	97



## William and Margaret McCalla: The 1938 Trip

**MM** = Entries from Margaret McCalla Journal

**WCM** = Entries from William Copeland McCalla Photographic Record Journal

**U** = 1938 Photo. Film type, speeds, exposure time and aperture are features of the record.

**PAA** indicates that a colour lantern slide is available at Public Archives of Alberta (Edmonton). Catalogue number is given.

**MN** indicates a black and white image may be seen at Museum of Nature (Ottawa). Volume number is given.

**UA Herbarium Museum** indicates that the specimen itself may be found at the University of Alberta Vascular Plant Herbarium Museum (Edmonton)

<b>Wednesday, 15 June 1938</b>	<b>Travel day. Calgary to Shelby, Montana</b>					
MM	<p>Will and I left home at 8 am. Drove Edith down to the office with us and then we set forth on our projected summer trip to Idaho and other states. We took the south road to <b>Lethbridge</b> and found the road to be in pretty good shape. Some rain yesterday had laid the dust fairly well and there was not much traffic. At the Lethbridge end of the road it was a little drier. The crops looked very well indeed especially as far as <b>Carmangay</b>. Along the way we saw Thermopsis, Flax, astragalus (<i>Drumundii</i>) and <i>Ai. Pectinatus</i>, the latter fairly common farther south, covered with a mist of little butterflies, prairie mallows, Stormy or purple dock, just near <b>Lethbridge</b> there was a <i>Senecio</i> and along the long hills <i>Astragalus Bisulcatus</i>, large showy clumps. Ate our lunch at the tables in the little park by the lake. A fresh breeze blowing off the lake. The car rode beautifully. Three hours and a half. Road a little rougher S. of Lethbridge till Milk River – smoother. Lots more of the white <i>A. Sweetgrass</i>. Cleared customs and immigration at 4:15. Strict but no trouble. Montana hard road very pleasant. <i>Astragalus pectinatus</i> growing along this road. Reached <b>Shelby</b> at 5:10. Staying for the night at Abbott's Cabins where we stayed last August. \$2 a night. Fully modern. We supply our bedding. 50 cents extra for bedding. Drove 272 miles today.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Abbott's Cabins</td> <td>2.00 + 0.50 bedding</td> <td>Shelby, Montana</td> </tr> </table>			Abbott's Cabins	2.00 + 0.50 bedding	Shelby, Montana
Abbott's Cabins	2.00 + 0.50 bedding	Shelby, Montana				
WCM	Nothing recorded.					
<b>Thursday, 16 June 1938</b>	<b>Travel day. Shelby to Helena</b>					
MM	<p>Highway 91. Left <b>Shelby</b> after a good night. Warm &amp; bright – cloudy this am. 9:30. Both here and in S. Alberta, tumbling mustard and Russian thistle, last year's dried up bunches, lodged against the fences. First roses showing blooms - <i>Astragalus Bisulcatus</i>, <i>gaura</i>, mallow, great patches of Hoary Cress becoming a pernicious weed, not in fields but along the roadside where we saw it. White <i>Astragalus</i> &amp; <i>A. hyperglossio</i> (low purple). <b>Conrad</b>. Saw our first cactus. <b>Brady. Dutton</b>. White onion same as at Calgary. <i>Eriogonum</i>, Cactus not in bloom just starting in some places near <b>Vaughn</b>. Greasewood. Profusion of Mallows. Same yellow composite saw yesterday. This road is a decidedly winding road through rolling and open country. Some straight stretches. Met our first trailer. Building new road 4 or 5 miles. White beardtongue, <i>Senecio</i>, ragless</p>					

	<p>composite?<sup>2</sup> on flat 7 mls. north of Great Falls. Collected. <b>Great Falls</b>. 11:45. Got gas at Texaco station 956 mls. Bought 10 Am. Gls. Crossed Missouri River. Stopped for a white <i>Borage</i>-like at ? in gravelly soil a few (3) mls. south of Gt. Falls. Fruits of grand plum. Mountains in view in distance. Showy dock. Sunflowers (small). Wild Licorice. Euphorbia 15 to 20 stems sometimes came from a single root. Collected 10 mls. south of Gt. Falls. Great mass of this plant along road and in fields. Near <b>Ulm</b>. Burma shave. Red this yr. "Here's something that could really soak the whiskers off a radio joke". "No lady likes to dance or dine, escorted by a porcupine". Growth better as we go further S. <b>Cascade</b> – small town, lupins, roses more generally not in bloom. Gaillardia. Stopped for a pretty <i>Hedysarum</i> on a cut bank. Following along the Missouri R. Toe? &amp; milkweed in bloom. <b>Gates to the Mountains</b> 3358 ft. elevation 59 mls. from <b>Helena</b>. Masses of brown rock jutting up in odd picturesque forms some conifers on grassy slopes. Stopped for lunch by a rocky bank. Railroad and river at the side of Highway. Yellow and white <i>Eriogonum</i>, <i>Senecio</i> with small white root leaves, all on practically bare rock cliffs. Also collected an Alum root. On same bank is choked cherry, Poison ivy, <i>Rhus Trifoliata</i>, <i>Climatis</i> small white, <i>Yuca</i> on bank. Wild licorice. Photographed the cliffs where these grew from bank of the Missouri R. Photographed Showy purple Dock along railway track. A very warm flesh color rather than the purple it is sometime. Left here at 10 to 3. Crossed Missouri R. Driving through the hills along the river, a winding road, between cliffs and river. Speedometer at 1000 miles. Cow parsnip. Dearborn R. joins the Missouri, yellow pine on bank. Crossed Missouri again near <b>Wolf Creek</b>. Very rich <i>Astrafalus</i> likely <i>parme</i>?. Blue beardtongue, purple <i>Phocelia</i>, reddish brown color in rocks as we go south, great display of the blue beardtongue as we came through the rocky pass but couldn't stop on the winding road. Historic marker – 1805. Captain Lewis (and Clarke) called this the Gates to the Rocky Mts. Extract from his diary. On meadow by the marker more growing mallow, guara, phlox, <i>Actinella</i>, White borage, cactus. Collected <i>Actinella</i> A. <i>Missouriasis</i> &amp; <i>Guara</i>. Perfume of guara is very sweet and delicate. Ran into a thunderstorm 12 mls. from Helena. Leave the Mts. about 10 miles north of Helena. Arrived in <b>Helena</b> in a thunderstorm, heavy wind and rain. 4.45. Staying at The Treasure State Cabin Camp. Single cabin \$1.75- open garage. Fully modern. Hot water.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Treasure State Cabin Camp</td> <td>1.75</td> <td>Helena, Montana</td> </tr> </table>	Treasure State Cabin Camp	1.75	Helena, Montana
Treasure State Cabin Camp	1.75	Helena, Montana		
WCM	<p><b>U19</b>. View of rocky hills where I collected plants. <b>Nos. 4734-7<sup>3</sup></b>, above the road a few miles SW of Great Falls. 1/10 sec. F20. Isos 2.</p> <p><b>U20</b>. Purple Dock. Near the same place on railroad embankment. 1/5 sec F18. Bright. Cloudy. The leaves were a rich blue green, the fruits in this case were a rose-flesh color rather than the strong purple sometimes seen.</p> <p><b>U20</b>. B/w photo at MN. V.1.3.24. Labelled <i>Remux Venosus</i></p>			
<b>Friday, 17 June 1938</b>	<b>Travel day. Helena to Dillon, Montana.</b>			
MM	<p>Left the cabin at 8:55 after a good night. Rained in night, but is fine this morning. Got gas at a Texaco before leaving the city. 1051 mls. – 8 gls. <b>Helena</b> a pretty city – state capitol quite a fine looming building. The city is built right up against the hills – more rain than usual. A gravel road for 11 miles en route to <b>Butte</b>. Driving through beautiful mountain country. Slopes green and wooded. Quantities of the blue beardtongue along</p>			

<sup>2</sup> ? indicates original text not readable.

<sup>3</sup> Field Note Book collection number. At the same time as WCM was taking photographs he was collecting specimens which he detailed in a separate Field Note Book, some of which are at the UA Herbarium

	<p>the banks. Stopped 9 mls. S. of <b>Helena</b> to collect Blue beardtongue, rose colored variety, Arnica, Lithospermin probably?, tall Potentilla, something like Argenta. On this bank the same Senecio gathered yesterday was abundant. Starting to rain again as we go along. 25 to 10 a heavy shower. Great piles of stones and coarse gravel in low place for some little distance, further on showed it was dredged out, the machine was working. Maybe digging out for a canal or something. Hard surface. <b>Alahambra</b> hot springs near <b>Clancy</b>. Stopped just past Clancy in wet flat. Collected a fine tall Thermopsis, a chickweed and a <i>Phacelia</i>. The Thermopsis made beautiful golden patches almost carpets in places. Collected an <i>Iris</i> here too. Astragalus drummondii. A historic marker telling of the time when mule and ox teams freighted along this road. How the language of the teamsters was fluent and vivid. Phacelia very abundant and beautiful along here. Photographed a clump of Phacelia by the Historic Marker.</p> <p><b>Jefferson City</b> – a small collection of buildings along both sides of highway. Hoary Cress in patches. Geranium, bright pink. Balsam root. Choke cherry in bloom. Getting higher. See air beacons on the hills. Lovely view across valley to further hills. Beardtongue in purple blue patches. White Borage very common. Just at <b>Boulder</b> stopped to collect Pentstamon blue and purple, yellow <i>composite</i>, purple <i>composite</i>, little Astragalus with wooly pods, Oxytropis growing here, Phacelia, bitter root, erigeron, same as in Columbia valley. Photographed yellow and blue composite. Boulder river not very large but rapids. Solid mass of blue beardtongue on slope – a marvellous sight. Historic Marker in mining country. <b>Basin</b> a small town built along the highway. Stopped for lunch on a stony place beside the road. Stream running at the side of the road. Phacelia, beardtongue, choke cherry, Potentilla same as yesterday collected. Just finished when rain came on again. Boulder river again. <b>Shamrock Forest Camp</b>. All along since leaving Helena there has been really mountain driving. The country is all hilly or mountainous and the roads winding up and down along streams, between hills with some fine views. Good roads. <b>Elk Forest Camp</b> in Deer Lodge Nat. Forest. 1105.9, 1110.8 2/3s – 5 mile test. Fine view as we come down around the mt. with <b>Butte</b> a way across the valley. Smelters (likely) – big looking industry. <b>Meadowville</b> a suburb of Butte – coalmines. <b>Butte</b> arrived at two o'clock. Will has gone to the Post Office some blocks away to leave word about mail, also to mail letters to Edith and Louise. Thunderstorm again a few miles out of Butte – 5915 altitude – continental divide.</p> <p><b>Feely, Mont.</b> Still raining. Will collected one Astragalus, <i>one</i> Oxytropis white flowers, one Crepis, dwarf Eriogonum. A broad open summit. Iris in quantity. Raining too hard to photograph. Some good cloud effects – Stopped on a hill to collect a beautiful deep rosy red Oxytropis – lovely clumps on the slope 8 mls. north of <b>Melrose</b>. Cactus Opuntia on same slope. Tall Thermopsis along here! <b>Big Hole River</b> sunshine again. Quite a stretch of flat straight road. Sage brush and Greasewood. Cactus many miles 4:45 stopped at Shady Nook Auto Camp \$1.25. Not very good cabins but we hope clean. 1 ¼ mls. n. of <b>Dillon</b>. 1183 mls. Very wet all around.</p> <p><b>Listed expenses</b></p> <table border="1"> <tr> <td>Bread &amp; buns, melon</td> <td>0.20</td> <td></td> </tr> <tr> <td>Stamps</td> <td>0.15</td> <td></td> </tr> <tr> <td>Shady Nook Auto Camp</td> <td>1.25</td> <td>Dillon, Montana</td> </tr> </table>	Bread & buns, melon	0.20		Stamps	0.15		Shady Nook Auto Camp	1.25	Dillon, Montana
Bread & buns, melon	0.20									
Stamps	0.15									
Shady Nook Auto Camp	1.25	Dillon, Montana								
WCM	<p><b>U21. Phacelia</b> (no. <b>4745</b>) 1/100 sec. F16. Superpan press. Sunshine. Foliage, blue green strongly and attractively veined. The flowers were practically the same color as <i>P. serisia</i>? Growing on a bank of reddish yellow gravel.</p> <p>Entry <b>4745</b> from the Field Note Book (applicable to plant photograph <b>U21</b>). <i>Phacelia Cucophylla Torr.</i> Road side and banks, often making a colorful display as where photographed, a few miles south of <b>Clancy</b>, near a Historic marker.</p>									

	<p><b>U22. (4748).</b> A low <i>Compositae</i> with neat little leaves and relatively large flower heads. The rays are a rich purple much like those of the taller <i>Compositae</i> photographed near Kimberly BC last June. Leaves a blue green 1/10 sec. F 25. Super pan. Entry <b>4748</b> from the Field Note Book (applicable to plant photograph <b>U22</b>). <i>Purple composite, Sideranthus</i>. Forming clumps and masses in fields and roadsides. Photographed. At <b>Boulder</b>. The unopened heads hang over.</p> <p><b>U23 (4749).</b> A low yellow <i>Compositae</i> with entire leaves 1/10 sec. F20 Bright sun Super pan. Leaves green, not at all blue green, rays very bright gold with orange centers. Entry <b>4749</b> from the Field Note Book (applicable to plant photograph <b>U23</b>). <i>Aplopappus acaulis (Nutt.) Gray</i>. Growing in field with last number. Rays very bright gold. Photographed.</p>
<p><b>Saturday, 18 June 1938</b></p>	<p><b>Travel day. Dillon, Montana to Idaho Falls, Idaho.</b></p>
<p>MM</p>	<p>Both put on the high boots. Left the camp after a good night. No conveniences but the bed was comfortable. 8:40. More rain in the night. Fair this morning but threatening. <b>Dillon</b>. Normal school at Dillon. Mt. range ahead over which we must go. Poplars in this region are narrow leaved. Cottonwoods. Willows. Large showy thistles coming into bloom. Cactus just in bloom. 3 historic markers in 14 mls. Mountain road under some towering rocky piles. Stopped to photograph a scene with Iris + Thermopsis in foreground. Large thistles in flat meadow with Iris + Thermopsis. Water moss along stream. Mosses in places. <b>Armstead</b> has some nice looking cabins. Gorgeous shooting stars. Stopped to look at them. Same variety as our own. Collected a ? primrose and Valeriana edulis?. Low moist ground along the road. Alt. 5900' 35 mls. from Dillon. Climbing gradually 6100' in a few mls. Passed a well-marked landing field Alt. 6140' Some reddish color in the hills. Getting near the snowbound mts we could see when we left Dillon. Some farm buildings in sight, a fairly broad valley through here. <b>Lima</b>. A small town on the highway. Got 10 gals gas – 1234.9 mls. More shooting stars and iris. Lovely mats of Phlox in ditch. Photographed Phlox &amp; <i>Astragalus</i> near summit of Monida Pass, 6800 by aneroid. Very cold wind blowing. Good iris but too windy. <b>Monida</b>. Summit 6872 – a broad flat pass again. Idaho. 12 noon. Masses of dwarf lupines. Patches of snow on nearby mts. Some lovely blue Cosmos. Collected cosmos, polyganum?, yellow composite, yellowing evening primrose. Just over the summit Geum triflorum, iris, a dock all growing there too. A little further on about 300 ft. lower we stopped while Will went down a rugged bank and collected Antelope bush flowers, a beardtongue, golden currant, alum root, and on top by the road balsam root with divided leaves, arnica, a taller phlox, larkspur. The hills are yellow with balsam root and the lower places blue with cosmos. Lovely lupine is growing here too. Saskatoons on bank, pink lupine. Plenty of Douglas Fir in these slopes. Ate our lunch here in a nice sheltered spot part way down the bank. Started to rain so couldn't photograph. Fine bridge over the deep gully or ravine. More lovely lupine. White wyethia, balsam root. Afraid it is settling to rain again. Choke cherry in bloom. Very abundant. <b>Spencer</b>. A small town with good school. Open country for many miles. Sage bush about the only vegetation. Very fine road – big wingless locusts on the road. Very thick. <b>Dubois</b>. Beautiful Persian rose bushes in gardens. <b>Jefferson Co.</b> Castors in bloom. Collected an eriogonmia, psordia. Alt. 4800', among cactus with rich colored flowers, some paler yellow ?. <b>Hanover</b> – small hamlet. Desolate looking country for miles. Some green fields showing in distance. Large herd of cattle in fields ahead. Collected a white astragalus. 1310 mls. Water beside road again. Red winged blackbirds. Quantities of primulus in ?</p>

	<p>ditch. <b>Roberts</b>. Small town. Farming country though not extra good. No good buildings. Stopped to collect plant like sweet Alyssium (Brucifer?), a legume mostly in fruit, a composite may be a Tormendia? – growing among sage brush, a few cactus plants. El. 4750'. Large root houses may be for potatoes. <b>Idaho Falls</b>. 4 pm. Staying at Smith's Cabins. \$1.50. Fully modern. Walked downtown and bought some food. After dinner we pressed all the plants (20) and wrote the notes. Found the boots very comfortable.</p> <p><b>Listed expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>1.01</td> <td>Idaho Falls, Idaho</td> </tr> <tr> <td>Smith's Cabins</td> <td>1.50</td> <td>Idaho Falls, Idaho</td> </tr> </table>	Food	1.01	Idaho Falls, Idaho	Smith's Cabins	1.50	Idaho Falls, Idaho
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Smith's Cabins	1.50	Idaho Falls, Idaho					
WCM	<p><b>U24</b> Scene along the highway, 12 miles south of Dillon, Mont. A creek ran between the Highway and the steep hillside forming a narrow wet meadow which extended on both sides of the road. The Yellow <i>Thermopsis</i> and the pale Iris are reflected in the water of the creek, the bottom of which was a yellowish color. Behind the meadow, a narrow leaved willow formed a zone with the thickets of choke cherry showing to the left. Above grass and sage brush clothed the steep slope to the naked dark reddish brown crags at the top. 1/25 sec. F11. Superpan. Cloudy.</p> <p><b>U24</b> B/w photo at MN. V. 1.6.25</p> <p><b>U25</b> The matted <i>Astragalus</i> with rich purple flowers No, <b>4775</b>. Color descriptions in the botanical record book. Sage brush shows behind. 1/25 sec. F11 Superpan</p> <p><b>U26</b> Phlox. Three rounded masses on the bottom of a broad flat ditch left by the roadmakers, near the summit of Monida Pass. The color description of the three clumps all of which varied are found in the botanical record <b>4776</b>. 1/25 Sec. F16. Bright cloudy. Superpan.</p>						
<b>Sunday, 19 June 1938</b>	<b>In Idaho Falls</b>						
MM	<p>A fine bright, warm sunshiny morning. Had a good night, very comfortable bed. Wood and coal for the stove – very nice coal. Had breakfast about 9:30 – Will dried and changed felts for both presses. Has 49 species collected and pressed now. Have decided to stay here today. There are lovely roses in bloom just outside our door. The day has kept bright and became quite hot. We had a sleep in the afternoon. Later Will dried and changed all the felts again. Mailed a letter to Mother. Will photographed a twig of the Antelope bush in the cabin.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Ice cream</td> <td>0.15</td> <td></td> </tr> <tr> <td>Smith's Cabins</td> <td>1.50</td> <td>Idaho Falls, Idaho</td> </tr> </table>	Ice cream	0.15		Smith's Cabins	1.50	Idaho Falls, Idaho
Ice cream	0.15						
Smith's Cabins	1.50	Idaho Falls, Idaho					
WCM	<p><b>U27</b>. <i>Purshia tridentata</i> (Pursh) Drb. Antelope bush twig in beautiful bloom, brought from rocky slope near the summit of Monida Pass, about ½ nat. size. 5 sec. F16, super pan, grey background.</p> <p><b>U27</b>. B/w photo at MN. V. 1.6.9</p> <p><b>U28</b>. Ditto. Against black background. Stems rather warm brown, leaves deep green above, paler green beneath. Anthers deep "Golden Yellow"<sup>4</sup>, petals, delicate soon falling away, a pale creamy yellow, probably "Canary yellow" with a little "Chrome" added. The inner face of the spreading calyx lobes a very pale green, ovary a deeper</p>						

<sup>4</sup> Colours in quotations refer to labelled colour chips found in the back of the Photographic Record Journal. See Appendix 1. These colours were used as a reference in painting lantern slides later.

	<p>green, filaments pale yellow. Fragrant, not unlike Chokeberry, but not so heavy. See U27 for photo.</p> <p><b>U29.</b> Small red flowered <i>Mimulus</i> described under No. <b>4792</b>. The Craters of the Moon National Mon. 1/100 sec. F 11. Super pan press. Bright sun. Very windy, waited a long time to make exposure.</p> <p><b>U30.</b> Ditto. 1/25 F13. Super pan. Bright sun.</p>			
<p><b>Monday, 20 June 1938</b></p>	<p><b>Travel day. Idaho Falls to Craters of the Moon and return to Idaho Falls.</b></p>			
<p>MM</p>	<p>8 A.M. Bright &amp; fine. Left cabin en route to Craters of the Moon. Will be making Idaho Falls our headquarters for a few days probably. Cutting hay this fine morning. The yellow Persian roses are a feature in both the town and country yards. <b>Shelly</b>. A small town. <b>Firth</b>. <b>Wapello</b> – a Texaco station! Apple trees. <b>Blackfoot</b>. Sugar beet factory. 1360. Got gas at Texaco – 6 gals. Crossing Snake River, very high water. Marguerites? In fields. <b>Riversides</b>. Small town with good school. <b>Moreland</b> Tiny hamlet. Sage brush the main vegetation, some fields with irrigation. Just out of Moreland large bushy mallow, redder than ours. No habitation or cultivation for miles just desert – a fine road across it. RR running parallel with road. Crepus &amp; cactus with sage, here and there. Eriogonum and other plants just at <b>Taber</b> a RR section place?. A lovely road – met 2 trucks in 25 mls. Met a car some miles further on. Mountains in sight, some off to west with steaks of snow. <b>Midway</b>. A service station. <b>Butte City</b>. Big butte to west – an isolated mass of rock. Twin Butte to east, further away. Met another truck. Two Cal. cars just passed us. 50 mph supposed to be the limit. Feathery plant, bright cactus. Stopped to photograph lovely clump of rose colored cactus 42 mls. from Blackfoot. 3 cars passed us on the way to Caters of the Moon. Met 2 others perhaps 4 more all morning. A little more traffic in afternoon. Lupine, mallow, creepers, lupine rather bushy. Look like Margarites? 6 mls. from Arco. Coming to ? to over 50 mls. of desert called Snake River Desert – a large tract. <b>Arco</b>. Cabins. Gravel road to Craters of Moon – good gravel. <b>Big Lost River</b> crossed. Irrigation and cultivation. White Astrajohn, Balsam root – lots more sage brush – low Composite growing among the brush. Outcropping beginning to show. Pale yellow masses on hills. <b>Malton?</b> – one home with a Telephone. Blue beardtongue – pale lupines, sunflowers, sheep near a lovely cabin. <b>Craters of the Moon</b>. Huge lava fields but not really spectacular. Odd honeycomb lava rock. A low pink flower just inside the limits. Stopped &amp; took two photographs. Very windy, almost an impossibility. Larkspur, balsam root, Eriogonum, Antelope bush and others. Clamatis. At headquarters there is an Inn &amp; cabins. Had to register. One kind of rock so light with holes that is floats. Ate our lunch under a Limber Pine, at a table in the camp ground among rough lava rocks. “Old Man of the Craters” very good man in stone. Little Eriogonum growing on several surfaces. Great field-like areas look as if they were raked and smoothed. Rough rock formations also about. Walked to the caves. Looked down the crater site, ice which never melts. Scenes among the lava. 1<sup>st</sup> photo. 1/50 F 11, 2<sup>nd</sup> photo. 1/65 F 11. 3<sup>rd</sup>. 2 have crags with Limber Pine between, antelope bush. Collected larkspur, mimulus, beardtongue and eriogonum – in the “Monument”. The gravel crunched like cinders. Stopped just outside the Park for glorious blue beardtongue, sunflower, pale lupine. Stopped for a different blue lupine. After Arco stopped for Mallow, Indian Paint Brush, feathery plant, Crepis. Reached the cabin about 7 o’clock. Will had the oil changed and got gas. 12 gal. 1564 mls.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Oranges</td> <td>0.08</td> <td></td> </tr> </table>	Oranges	0.08	
Oranges	0.08			

	Bread	0.10													
	Smith's Cabins	1.50	Idaho Falls, Idaho												
WCM	<p><b>U31.</b> <i>Opuntia</i>. A mat with beautiful rose colored blossoms. Stems rather grey blue green, spines long and white, outer bracts greenish, purple brown tinted. Petals are in "Wild Rose Pink", a little deeper towards the base, with a little "Royal Crimson". Anthers are yellow somewhat creamy, filaments purple, stigmas deep green. 1/100sec. F 16, Super pan press. Bright sun.</p> <p><b>U32.</b> Limber Pine at Craters of the Moon. White beardtongue and Antelope bush showing in the foreground. 1/50 sec. F 10. Isos 2. Super pan.</p> <p><b>U33.</b> View of the piled up Lava rocks with trees in hills in the back ground. 1/50 sec. F 11. Super pan. Graflex.</p> <p><b>U34.</b> Another view of the Lava rocks. 1/65 sec. F 11. Graflex.</p> <p><b>U35.</b> Limber pine growing between two crags with dark rock. Antelope bush. 1/35 sec. F 12. Isos 2. Graflex.</p>														
<b>Tuesday, 21 June 1938</b>	<b>In Idaho Falls.</b>														
MM	<p>Staying here today. Will has dried and changed the felts and is ready to press yesterday's plants, 16 species taken care of – I did a bit of washing and wrote the notes. Sunshiny early, but dusty and windy later. Cloudy – later again cleared up, winds were down – it is a nice evening. Walked downtown. Got some food, mailed cards to Edith and Dency, 2 pairs of socks and a birthday note to Donna. No mail yet. Told Edith to send next mail to Boise. Two California ladies in cabin next door going to L. Louise were glad of the information that Will gave them.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>1.60</td> <td></td> </tr> <tr> <td>Socks for Donna</td> <td>0.25</td> <td></td> </tr> <tr> <td>Postage</td> <td>0.28</td> <td></td> </tr> <tr> <td>Smith's Cabins</td> <td>1.50</td> <td>Idaho Falls, Idaho</td> </tr> </table>			Food	1.60		Socks for Donna	0.25		Postage	0.28		Smith's Cabins	1.50	Idaho Falls, Idaho
Food	1.60														
Socks for Donna	0.25														
Postage	0.28														
Smith's Cabins	1.50	Idaho Falls, Idaho													
WCM	Nothing recorded.														
<b>Wednesday, 22 June 1938</b>	<b>Travel day. Idaho Falls to Grand Teton National Park.</b>														
MM	<p>Left here at 9:05 en route to Teton. Fine bright A.M. Highway 191. Irrigated farming with lots of sugar beets, other crops, hay, grain and potatoes. <b>Rigby</b>. Sugar factory. S. fork of Snake River – very high. A dusty detour of several miles. Large ? of poplar trees. 1<sup>st</sup> Gilia along road. <b>Rexburg</b>. Nice park playground – stretched out town – wide main st. Good looking town. <b>Sugar City</b>. Factory. Turn here on highway 33. Mts. In view ahead. <b>Teton</b>. Small hamlet. Drive something like the Millarville Road – broad expanse and mts. beyond. Snow on them. Sunflowers? In field. Road under construction 9 mls. and gravel. Lovely clouds over the mt. range – Iris. Crossed Teton River – Boy sitting on fender of a car leaning against an inflated tire. One way to carry an extra passenger. Large flock of sheep. <b>Tetonia</b>. Small town. Phlox. Hard surface again. Balsam root, broad leaves, Indian Paint Brush. <b>Driggs</b>. Larger town than Tetonia. Blue beardtongue. Lively Gilia. <b>Victor</b>. Wyethia? Targhee Nat. Forest. Geranium, gilia, beardtongue. Climbing up winding curved road rather narrow gravel. <b>Wyoming</b>. Stopped for lunch by</p>														

	<p>the edge of an open woods where we found lovely flowers. Alt. 7200' by aneroid. A large white Columbine. Exquisite which Will photographed, geranium, sonilacium, mitellia, violets, false forget-me-not, blue clematis, valerian, pedicularis, brodia, strange white flowered currant, mountain lover, lungwort, arnica, calypso, phocelia, unisia?, lupine. Trees – Douglas Fir, Lodgepole Pine, mt. ash. Water is stream appears red from the soil. Elderberry, Saskatoon, Balsam root. A very steep grade with switchback. Snow at the level across the gorge. Summit 9250' according to map 8429'. A hard climb. Snow in patches at top. Climbed a slope above the summit. Will found a new blue flower and photographed it. Spring heather a profusion, waterleaf, two violets (yellow), upright clematis, twin flower honeysuckle. Photographed view from summit. Teton Pass. 1/90 F 8. Isos 2. Grayflex. Sticky currant. Very steep going down other side, switch back, 6 turns right together. Stopped for Oregon grapes. Pretty little lakelet fed by a mtn. stream. Gilia. S. Fork of Snake R. again. <b>Jackson.</b> A town of 500. Hard surfaced road runs through valley. Teton Range with its high peaks and snow showing across valley. Stopped to photograph the Range. At the summit was a sign. "Howdy stranger. Yonder is Jackson's Hole – the last bit of the West". View photographed from summit looking down over Jackson's Hole. Antelope bush in bloom. Balsam root. High peak – Grand Teton, 13,766 ft. Very deep colored larkspur carpeting the meadows. Jenny Lake P.O. Cabin beautiful but \$4. Came along to the Park Camp grounds. <b>Grand Teton National Park</b>, no charge. Have our tent up and beds made. Hope for good weather. High mts. surrounding Jenny Lake. Mt. Teewinot at 12,317 ft. &amp; St. John Ridge at 11,412. Went to the campfire program.</p>
WCM	<p><b>U36.</b> A beautiful white flowered long spurred Columbine, in open woods part way up Teton Pass: a stunted and broken Douglas Fir in the background. The foliage rather bright but light green with some yellow in composition, pale grey green beneath. Stems light yellow green, Sepals almost white on the inside. A very pale mauve beneath, as are the spurs of the petals, otherwise the petals are white. Anthers rather bright yellow, stigmas green. 1/50, F10. Super pan. Sunshine.</p> <p><b>U37.</b> Ditto. 1/100 Sec. F12. Super pan Press.</p> <p><b>U38.</b> <i>Synthyris pinnatifida</i> S. Wats. The new blue flowered plant with finely cut leaves growing more or less mat like formation on steep gravelly slope 200 ft. above the Summit of Teton Pass, 8429 ft. 1/10 sec. F 16. Super pan, sunshine. Leaves are a dull grass green, stems especially at base somewhat purplish. Flowers a purplish blue much like "Heliotrope", filaments the same, anthers almost black, bracts and calyx are green, the calyx sometimes tinted purple.</p> <p><b>U39.</b> The same group of blue flowers from a different position. <i>Claytomia</i> show in the background. 1/5 sec. F 16. Bright cloudy. Super pan.</p> <p><b>U40.</b> View from Summit of Pass looking down into Jackson Hole. Fine clouds over the mountains. Graflex 1/90 sec. F 8. Isos 2. Sunshine.</p> <p><b>U41.</b> View of the Tetons and Grand Teton. 13,466' from across the sage brush plain. A splendid sky. Graflex 1/90 sec. F 8. Isos 2. Sunshine.</p>
<b>Thursday, 23 June 1938</b>	<b>At Grand Teton National Park.</b>

MM	<p>A Dr. Elson &amp; his wife are camped next to us. He teaches Biology in Minnesota somewhere. Has a small camera. Showed Will some of his slides. Has a projector too. Electric of course.</p> <p>Slept rather poorly, the first night in tent. The night was not very cold, but we needed plenty of covers. This morning is cloudy but not windy. We got the plants in the press without any trouble. Wrote up the notes. Walked to store &amp; got bread etc. about a mile each way. Bought some cards &amp; sent them to Ethel, Fred, Muriel, Kay, Helen, Helen and John, Edith. Will had a caller when I got back. Mr. Smith, the naturalist-ranger, who teaches Botany and Nature Study in Ogden, Utah H.S. They had a good visit talking about the flowers etc. Will showed him his enlargement album and he was quite impressed. We went for a little walk. It was damp and cool so we didn't go to the lecture. There was some rain in the early evening but we got to bed dry. Had a better night.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>0.41</td> <td>Jenny Lake</td> </tr> <tr> <td>Post cards, Postage, Other</td> <td>1.09</td> <td></td> </tr> </table>	Food	0.41	Jenny Lake	Post cards, Postage, Other	1.09	
Food	0.41	Jenny Lake					
Post cards, Postage, Other	1.09						
WCM	<p><b>U42.</b> <i>Smilacina</i>. The <i>Amplexicaulis</i> type on the rocky bank of Jenny Lake. Stems 25 in. – 30 in. high, growing among rounded boulders, gray and lichen-dappled. Mt. Teewinot, still covered with snow patches showing between Lodge Pole Pines. Mountain Lover growing with them, and <i>Arnica cordifolia</i> in the background. (Teewinot 12,317 ft.). 1/5 sec. F12.5 Super pan 5:30 pm. Sun softened by light clouds in front &amp; to the right.</p>						
<b>Friday, 24 June 1938</b>	<b>Cascade Canyon, Grand Teton National Park</b>						
MM	<p>Was a bit threatening but we went across the lake in a motor boat to start up Cascade Canyon. It rained for about 20 min. and we stood under shelter of trees. Blue sky began to show and it really was a good day, until about 4 when it started to rain again. We had to wait till 5 for the boat to come back but we kept dry under tree shelter. We must have walked 2 mls. up a mountain trail, sometimes in woods, some times overlooking Jenny lake. There was a rushing mt. stream, Hidden Falls called so because trees do nearly hide them. Farther up Will photographed a lovely scene, a rushing stream, mts.? Photographed also Saskatoon, <i>Smilacina</i>, <i>Senecio</i>, Balsam root on bark, 2 <i>Columbine</i>, wall flower. Flowers we saw – <i>Columbine</i>, <i>Fritillaria</i>, small <i>Claytonia</i>, <i>Arnica</i>, <i>Listeria</i>, <i>Calypso</i>, <i>Mitella</i>, <i>Erigeron</i>-like composite, unusually vigorous, <i>Pedicularis</i> like <i>bracteosa</i> flowers yellow, <i>Cinquefoil</i>, Wall flower, white beardtongue, larkspur, death camus, red fruited ? honeysuckle, bush-honeysuckle, ?, sticky currant, <i>Menziesii</i>, huckleberry, <i>Saskatoon</i>, meadow rues, baneberry, twisted stalk, <i>Saxifrage</i>, Balsam root, <i>Smilacina</i>, <i>Ceanothus</i>, star flower without bulb, Oregon grape, <i>Antennaria</i> composite branching from base (daisy like), parsley fern, Oak fern, woodsia, coral root, goodhera in early bud, <i>pyrola</i> in early bud (not abundant), 2 or 3 other <i>Saxifrages</i> not in bloom, <i>Scrophularia</i>, mountain lover in beautiful bloom, narrow leaved <i>Crepis</i>, a borage like false forget-me-not with white fls., mountain ash, a few in bloom, elderberry, a <i>Phacelia</i> in large bud, something like <i>Cerisia</i> leaves less divided &amp; not so silky, another <i>Phacelia</i> in bud much like the one photographed at the Historic Marker in Montana, willows that had been under snow were just beginning to bud, <i>Eriogonum</i>. Trees: Douglas Fir, Lodgepole pine, white bark pine, Alpine Fir, Engleman spruce, we saw some very large trees, bush Juniper forming low mats on rocks, not very common, Aspen &amp; Balsam Poplar, mountain maple not abundant.</p>						
WCM	Cascade Canyon						

**U43.** *Amelanchier*. Along the path. Here the leaves seem to be fully developed by the time the flowers opened. Leaves are a rich dark green and the white flowers are unusually large. 1/10 sec F11. Super pan. Rain just over. No sunshine.

**U44.** *Smilacina amplexicaulis*. A beautiful group along the trail, a bent Douglas Fir trunk rises behind. In the background somewhat out of focus are *Amelanchier* blossoms. Associated plants – Oregon grape, finely cut *Umbellifera* with yellowish flowers, and mountain lover. 1/10 Sec. F14. Partly in the sun. Super pan.

Entry **4834** from the Field Note Book (applicable to plant photograph **U44**). *Smilacina amplexicaulis* Nutt. Forming a beautiful group about 300 to 400 ft. above the lake, which we photographed. The leaves are a rich grass green, stems light green. The older flowers are creamy white, this includes the broad white filaments, the unopened anthers are sulphur-yellow. As they are mostly at the top of the panicle or on the tips of the side branches, each flower cluster is tipped with yellow.

**U44.** B/w photo at MN. V. 2.1.18



U44 *Smilacina amplexicaulis* Nutt. (Vagnera)

False Solomon's Seal, Wild Spikenard.

The tree is a Douglas Fir; white *Amelanchier* blossoms show in right background.

**U44.** Lantern slide at PAA. PR2007.0257/55



**U45.** *Balsamorhiza sagittata* On rocky bank several hundred feet above the lake. Among the many associated plants are *Amelanchier*, Oregon Grape, *Ceanothus*, blue Larchspur, *Senecio* (photographed), *Smilacina*, *Death Camas*, narrow-leaved *Crepis*, etc. In the background Douglas Fir and Lodgepole Pine. The rocks grey sometimes with warm reddish tinge & patches of lichen. 1/10 Sec. F22. Sunshine Super pan.

**U46.** *Senecio* of the exallatus type. Plant 16" high. Water leaf out of bloom and the fine cut foliage of the big *Umbellifera* show in the background. 1/10 sec. F20. Bright sunshine. Super pan.

**U47.** A fine view higher up in the Canyon with a rushing stream in the foreground, flanked by willows newly uncovered from the snow, Balsam Poplar and Douglas Fir show in the background. The mountain crag and cloud filled sky show in the background. 1/50Sec. F18 Isos 2. Super pan press.

**U48.** A rather dwarf wall flower stems 7" high against a rock along the path. 1/25 Sec. F16. Super pan press. Foliage quite a deep green, flowers golden yellow, not orange.

**U49.** *Aquilegia*. A beautiful group of the same species as U36 against a large rock in the open woods on the shore of Jenny Lake. The flowers were mostly white, but the sepals of some showed delicate mauve tints. The larger flowers were 3" across, see pressed specimens. The foliage was very lovely and luxuriant, fresh bright green. The rock of grey granite is much darkened with weathering, patches of lichens and dark olive green lines and patches of rather dry moss. The ground pretty well covered with dry spruce needles. 1/25 Sec. F11. No sunshine, had been raining. Super pan press.

**U49** Specimen may be found at the UA Herbarium Museum

### Specimen Details

**Record Type:** specimen

**Family:** Ranunculaceae

**Scientific Name:** *Aquilegia coerulea* E. James

**Collector:** McCalla, William C.

**Collector Number:** 04809

**Date Collected:** 1938-06-24

**Locality:** North America: United States, Wyoming, Grand Teton National Park, Jenny Lake

**Site Name:** Jenny Lake area, Grand Teton National Park: Site 3

**Site Description:** Rocky woods on shore of Jenny Lake, Grand Teton Nat. Park.

**Accession Number:** 70824

**U50.** Ditto. 1/5 sec. F11. Super pan. Light by now a little stronger.

**U50.** B/w photo at MN. V. 2.2.40

**Saturday, 25  
June 1938**

**At Grand Teton National Park**

MM

The morning was almost cloudless, the sky a beautiful blue. Fine clouds came up about noon and for a while Mt. Teewinot had mist part way down with the peak showing above. Will pressed the plants collected yesterday & changed all the felts. Are having a quiet afternoon. Will photographed a few plants in the campground. I called on the Logan's in the trailer across the road. Then we went for a little walk. A storm was brewing so we had our supper & fortunately just got finished in time before the rain came. Sat in car & wrote up the photographic notes while it rained quite hard. Too wet for the campfire program. It rained very hard for a good part of the night.

WCM

**U 51.** *Arnica cordifolia*. Growing just beside our camp in Grand Teton Park, among scattered Lodgepole Pine. 1 Sec. F18. Bright cloudy. Super pan. Flowers may have trembled slightly in breeze. The taller plant is 12" high and the blossom 2 ¼" in diameter.

**U51.** B/w photo at MN. V. 1.13.7.

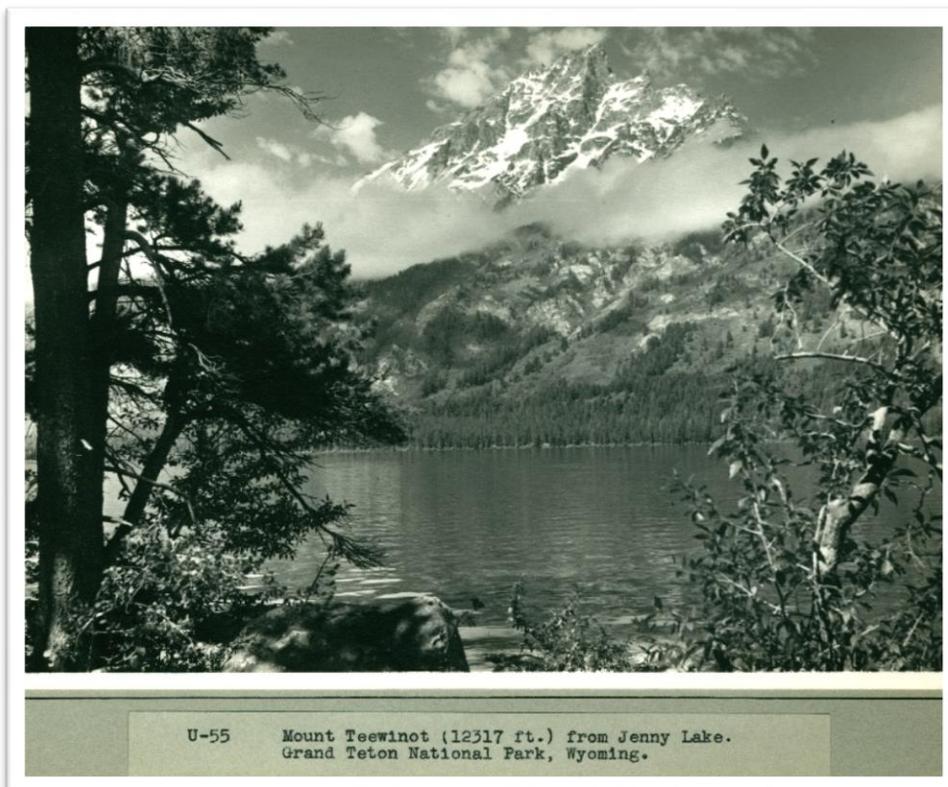
**U51.** Specimen may be found at UA Herbarium Museum

	<p><b>Specimen Details</b></p> <p><b>Record Type:</b> specimen</p> <p><b>Family:</b> Asteraceae</p> <p><b>Scientific Name:</b> <i>Arnica cordifolia</i> Hook.</p> <p><b>Previously Assigned Sc. Names:</b> <i>Arnica cordifolia</i> Hook. [original]</p> <p><b>Collector:</b> McCalla, William C.</p> <p><b>Collector Number:</b> 04846</p> <p><b>Date Collected:</b> 1938-06-26</p> <p><b>Locality:</b> North America: United States, Wyoming, Grand Teton National Park, Jenny Lake</p> <p><b>Site Name:</b> Jenny Lake area, Grand Teton National Park: Site 9</p> <p><b>Site Description:</b> Open woods near shore of / near Jenny Lake, Grand Teton National Park.</p> <p><b>Accession Number:</b> 68762</p> <p><b>U52.</b> <i>Berberis repens</i>. Three flowering stalks against rocks on the camp ground. The rocks dark in color for the type, the lower ones showing slight reddish warmth. A branch of Mountain lover shows against the rock. The light green new growth of the Mountain lover is in contrast to the dark leaves of last year. The old leaves are a dark rich green, those of the current year, soft lighter green often purple tinted. The flower stems and unopened buds green, as are the bracts, the flowers a light but bright yellow with deeper gold centers. Quite fragrant. 1/10 Sec. F11. Bright cloudy, no shadows.</p> <p><b>U53.</b> Ditto but in bright sunshine. 1/25. F16. Super pan.</p> <p><b>U53.</b> B/w photo at MN. V. 2.2.42.</p>			
<p><b>Sunday, 26 June 1938</b></p>	<p><b>At Grand Teton National Park</b></p>			
<p>MM</p>	<p>Clear this morning with lovely clouds sometimes over the mountain. Will photographed Mt. Teewinot – also Coralorrhiza among trees near the lake in the campground. Sun is beautiful &amp; air warmer at noon. Dried felts &amp; pressed a few plants – changed a press. Wrote a letter to Bill. Drove down to Jenny L. P.O. &amp; store, mailed letter &amp; bought some food. Drove north on the highway for some miles &amp; back along the lake road. The latter is a very fine drive through woods with the lake &amp; mts in view. Stayed fine &amp; we went to the Camp Fire program in evening. It was a good program, some music at first – the man who kept the horses plays the guitar &amp; sings. He sang a couple of cowboy songs very well. Then he with his guitar &amp; one of the old men around the campground played the mouth organ. He is a character &amp; it was fun to watch him keep time with his whole body. Two reels of moving picture – skiing &amp; a winter skyline trail &amp; the same route again in summer with some of [the] flowers. They were very beautiful. Mr. Cameron told about the skiing winter scenes while Mr. Smith told about the summer scenes and flowers. This was the warmest night yet and I had my best sleep.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>1.17</td> <td>Jenny Lake, Grand Teton NP</td> </tr> </table>	Food	1.17	Jenny Lake, Grand Teton NP
Food	1.17	Jenny Lake, Grand Teton NP		
<p>WCM</p>	<p><b>U54.</b> A fine view of Jenny Lake, panel form. On the left a Lodgepole Pine, rocks in foreground with mottled shadows, the lake showing some reflections of the mountain</p>			

beyond, but not perfectly. The top of Mt. Teewinot clear of clouds but about tree line a band of cloud was right across the mountain. 1/50 Sec. F14. Isos 2. Sunshine. Super pan press.

**U55.** Another view from the same spot. This time horizontal. More Balsam poplar show at right. The cloud scarf has thinned out considerably. 1/50Sec. F14, Isos 2.

**U55.** B/w photo at MN. V. 2.8.37.



**U56.** *Corallorrhiza*. A large group of flowering stems with another large group behind on the rocky ridge just above the shore of Jenny Lake. Plants in sunshine which came between the branches of the Lodgepole Pine. 1/25 Sec. F16. Superpan press.

**U57.** A view of the same two groups from farther back giving the setting more completely. The scene is framed on the sides by the trunks of Lodgepole Pine. Large rocks, large lichen spotted, also show. Associated plants are: *Amelanchier*, no blossoms, Utah honeysuckle, *Spiraea lucida*, not in blossom; Mountain ash on the bank just out of the picture, *Arnica* leaves of course, and Mountain Lover. The setting is beautifully mottled with sunlight and shadow. The Coral Root being in sunshine will, I hope, show up to good advantage. 1/25 Sec. F14. Superpan press. Height of stem from 10" to 14".

**U58.** A smaller group of the same against a shaded rock as background. Tallest stem 16" high. 1/2 Sec. F16. Superpan press. This was a mistake being intended for the Super pan. It may give some idea of the latitude of the Superpan press.

**U59.** Ditto. This time with Superpan. 1/2 Sec. F16. Many of the stems are much the color of "Red Earth", others more like "Brick Red" or a little more purple than that. The ovaries, and to a lesser extent, the sepals are like "Burnt Umber" with a little purple.

	<p>The lateral petals which are shorter than the sepals are lighter and yellow in tone. The lip is white spotted with quite bright purple "Wine Red" with a little "Wild Rose Pink". The lip has two teeth near the base. The column is yellow "Canary Yellow" or deeper at the top, lighter below, its inner face and the inside of the petals have small purple spots. The ovaries are a decidedly reddish brown (rose beige). The sepals and petals have the effect of a light brown slightly purplish and the inside a creamy tan. Seen in the sunlight the general effect is warm yellow and purple browns with a white purple spotted lip quite conspicuous. Here this coral root varies greatly in color. We saw some that were a sickly yellow brown with scarcely any spots on the lip. We also saw a few that had much more purple than the ones photographed. The stems and ovaries being especially bright. With the sun shining on them they approached the color of the Yellowstone lantern slide of the same species.</p> <p><b>U60.</b> Hidden Falls. The view takes in the whole sweep from the top of the mountain to the rocks on farther side of Falls. 1/25 Sec. F16. Proxar added. Sunshine. Superpan.</p>
<b>Monday, 27 June 1938</b>	<b>At Grand Teton National Park.</b>
MM	<p>This morning we expected to go across the lake with the nature hike to Cascade Canyon but it rained all morning off and on. This afternoon Mr. and Mrs. Smith whom we find very pleasant people indeed, went with us to the Canyon &amp; we had a pleasant afternoon. We looked for new flowers &amp; Mr. S. &amp; Will had a fine time finding things. Some plants Will could name for him. Tonight looks like to be fair &amp; it is not cold so we expect to go to the camp fire tonight where Mr. S. is to lecture on animals. Rained, hailed &amp; blew so there was no program.</p>
WCM	Nothing recorded
<b>Tuesday, 28 June 1938</b>	<b>At Grand Teton National Park.</b>
MM	<p>This was a beautiful day, bright, rather hot in spots, but fine for us. Dried all the felts in the morning, changed the presses. About 11:30 took a few biscuits etc. and went across to the Canyon again. Went across in the motor boat but after walking and scrambling over rocks and through thickets we walked back to camp along the trail along the west side around the south end of the lake. 3 mls. Will got six photographs. The columbine were even finer and more abundant as we walked along the lake and the twisted stalk were simply marvellous, so placed that the flowers were in plain sight. The white flowering raspberry was in bloom. Yesterday besides the flowers mentioned on our first visit to the Canyon we saw shooting star, Indian paint brush, a different little orchid, Rein orchid, white flowering raspberry, white flowered currant, another haberaria?,...The evening was fine, too, and we went to the campfire program. There was some music first and then a lecture with slides by an entomologist who is working on the beetles destroying Lodgepole Pine, western yellow pine, douglas fir. It was a very fine lecture, most interesting.</p>
WCM	<p>We took another trip up Cascade Canyon, exploring the lower part more thoroughly and walking back along the lake trail.</p> <p><b>U61.</b> A cascade of white water through the forest as seen between the trunks of Englemann Spruce. 1/50 sec. F11. Bright sunlight from left. Super Pan 6x9 cm.</p> <p><b>U62.</b> <i>Antennaria racemose</i> Hook. On a bank above the trail. Staminate flowers. Leaves a lively green above almost white on under side, which of course does not show. Stems light green, flowers white, somewhat dingy, due to the brown stamens. The newly</p>

opened flowers have organ-yellow stamens. Mountain lover and Pedicularis, associated plants. 6x9 cm.

**U62.** Specimen may be found at the UA Herbarium Museum

### Specimen Details

**Record Type:** specimen

**Family:** Asteraceae

**Scientific Name:** *Antennaria racemosa* Hook.

**Previously Assigned Sc. Names:** *Antennaria racemosa* Hook. [original]

**Collector:** McCalla, William C.

**Collector Number:** 04866

**Date Collected:** 1938-06-28

**Locality:** North America: United States, Wyoming, Grand Teton National Park, Cascade Canyon

**Site Name:** Cascade Canyon: Site 11

**Accession Number:** 69088

**U63.** *Pedicularis bracteosa* Benth. On grassy bank among scattered Douglas Fir, a fallen tree trunk serves as a background. The flowers here are yellow with almost no suggestion of purple brown as in our Rockies. Brown is also absent from the leaves which are a rather bright green. 1/5 sec. F10. Super Pan. 6X9 cm.

**U64.** *Actaea arguta* Nutt. Said by Mr. Smith to be *A. arguta*. Very large thrifty plants in a little shaded rocky ravine. Associated plants are the flowering raspberry, Utah honeysuckle and the swamp gooseberry. The plants were shaded by the trees above. Leaves a rich rather deep green, stems lighter more yellow green, flowers white, the pale cream of the anthers and the light brown of the older stigmas scarcely affecting the pure white tone when seen from a distance. The flowers are delicately and pleasantly fragrant. 1/5 sec. F10. Super pan 6x9 cm.

**U64.** B/w photo at MN. V 1.3.43.

**U65.** *Listera nephrophylla* Rydb. (*L. cordata*). Very large fine specimens of this little Twayblade orchid, growing among moss in wet ground edging a little stream in the woods. The flowers have as a background a fallen branch without bark which I darkened by rubbing with wet black soil. Even in the dark shelter of the trees and shrubs the wind was a problem. We hope, however, the long exposure was made in a lull. 2 sec. F11. Super pan. 6x9 cm. The *listera* is all green, leaves rather bright green, the thrifty moss being a little darker and bluer.

**U66.** *Streptopus amplexifolius* (L. DC). Beautiful growth of Twisted Stalk, the stems being 4 or 5 ft. high among Bracken above the Jenny Lake trail on the west side. So pleased the extremely dainty little flowers show to advantage. Foliage is a bright lively green above somewhat paler beneath, flowers are creamy. 5:10 pm. 1/5 sec. F9. Super pan. 6x9 in shade.

**U66** B/w photo at MN. V 2.1.4.

**U66.** Specimen may be found at UA Herbarium Museum

### Specimen Details

**Record Type:** specimen

**Family:** Liliaceae

**Scientific Name:** *Streptopus amplexifolius* (L.) DC.

**Collector:** McCalla, William C.

**Collector Number:** 04854

**Date Collected:** 1938-06-26

**Locality:** North America: United States, Wyoming, Grand Teton National Park, Jenny Lake

**Site Name:** Jenny Lake area, Grand Teton National Park: Site 8

**Site Description:** Woods on bank of Jenny Lake, Grand Teton National Park.

**Accession Number:** 36880

**U67.** *Ribes petiolare* Doug. A twig from Cascade Canyon set up at the camp. From upper edge of tin just behind the stem to the tip of the uppermost leaf is 12 in. The racemes standing out from the right from the branch to the top. Most flower is 4 1/8 in. The leaves are a rich green, the new stem and the uppermost leaves a brighter yellow green, the old stem grey brown. The sepals and the very small petals are white, ovary pale green, anthers cream colored. The plant has a strong, not pleasant, currant odor. 1/10 sec. F14. Cloudy. Super pan.

**U67.** B/w photo at MN. V 1.5.27 (not available)

**U67.** Lantern slide at PAA. PR2007.0257/126.



**U68.** Ditto. On 6x9 cm. Trunk of a Lodgepole Pine as background. ½ sec F11. Dull.

**U69.** *Geranium*. A fine group growing beside a guard log on the Park road. A small stem of Gilix also shows. 1/5 sec. F11. Cloudy. 5:15 pm.

The leaves are rich rather dark blue green, stems much the same, sepals covering buds, brown purple. Petals are purple "Magenta", some lighter than the sample but still a magenta tone, viewed with richer darker purple. The pistil is reddish purple, the unopened anthers, creamy with two dark lines and some purple shading. Pollen is a dull rather greenish yellow. The essential organs, however, do not show conspicuously even at a distance of a few feet.

**U69.** B/w print at MN. V 1.7.16. [Catalogued as *Geranium nervosum*]

**U70.** *Senecio*. On the gravelly flats at the foot of a Pine tree near the campsite. ½ sec. F18. Cloudy. 5:30 pm. Two films, one may have moved (stems about a foot high, flowers ¾ in to 7/8 in in dia.) Leaves rather blue green, not as much so as *Geranium*, stems a lighter and yellower green, rays bright gold, the centres are orange turning orange-brown in the older flowers. Those in the photograph, however, were in prime condition.

	<p><b>U70.</b> B/w print at MN. V.1.13.9. (Catalogued as <i>Senecio Rubicaulis</i>)</p> <p><b>U71.</b> <i>Eriophyllum gracile</i> (4843). Leaves are a grey green of a blue rather than a yellow tone, beneath they are a light grey. Stems slightly purplish especially or only below. The rays are rich deep gold almost bright orange, the centers are a deeper orange. In the youngest discs there is a faint green center. Buds are grey, greenish at the base, on top there is a slightest suggestion of purple brown. 5 to 8 inch. ½ sec. F16. Stems 5 to 8 inches high, flowers 7/8 to 1 in. dia. Entry <b>4843</b> from the Field Note Book (applicable to plant photograph <b>U71</b>). <i>Eriophyllum gracile</i>. Near campground, G. Teton.</p>			
<b>Wednesday, 29 June, 1938</b>	<b>At Grand Teton National Park.</b>			
MM	<p>It started to rain in the early morning and poured until noon. Still looks like more at 3:30 pm. Bought some food at the Jenny Lake store. Stayed dry till the lecture was nearly over. Then began to rain again so they had to put away the film. The pictures were of the Teton Mountains, stills first with a lecture by Dr. Cameron. Then a movie reel showing the actual ascent of Grand Teton. In the afternoon Will found a new Coral root one he has been hoping to find for years, <i>c. Mertensiana</i>, a beautiful bright purple stem and flower. He also photographed some habitats, geraniums, Senecio. Mailed a letter to Edith.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>2.17</td> <td>Jenny Lake, Grand Teton NP</td> </tr> </table>	Food	2.17	Jenny Lake, Grand Teton NP
Food	2.17	Jenny Lake, Grand Teton NP		
WCM	Nothing recorded.			
<b>Thursday, 30 June 1938</b>	<b>At Grand Teton National Park.</b>			
MM	<p>Rained during the night but was clear first thing this morning. Will photographed the new coral root under the trees at the camp, used the black background and made three exposures. Rained while we wrote up the description in the car, but cleared up enough for us to have our lunch at the table. Just finished and cleared up in a hurry when it rained again and now is, as we sit in the car at 1:30. Rained for quite a while and then as it was cold and wet we sat in the car looking over possible routes in Idaho and I knitted on a pair of booties. About 4 o'clock Mr. Smith brought Professor Hitchcock of U. of Washington botany department and introduced him to Will. He is with a party of students on a summer semester field tour expecting to be away all summer. Will showed them the new coral root and as neither had seen it they went off to locate it again. Later Will photographed a habitat of both the coral root and a sunflower. Got our dinner dry and comfortably and hope now to go to the campfire program.</p>			
WCM	<p><b>U72</b> <i>Corallorrhiza Mertensiana</i> Bong. (4870). 1/5 sec F11 super pan. Three stems against black background mild rays of sun coming through trees and touching the specimens. Entry <b>4870</b> from the Field Note Book (applicable to plant photograph <b>U72</b>). <i>Corallorrhiza Mertensiana</i> Bong. On the wooded ridge above Jenny Lake. A striking plant in color and form of flowers. <b>U72.</b> B/w photo at MN. V.1.3.12</p>			

**U72.** Specimen may be found at UA Herbarium Museum.

## Specimen Details

**Record Type:** specimen

**Family:** Orchidaceae

**Scientific Name:** *Corallorhiza mertensiana* Bong.

**Collector:** McCalla, William C.

**Collector Number:** 04870

**Date Collected:** 1938-06-29

**Locality:** North America: United States, Wyoming, Grand Teton National Park, Jenny Lake

**Site Name:** Jenny Lake area, Grand Teton National Park: Site 2

**Accession Number:** 36728

**U72.** Image of pressed flower at UA Herbarium Museum



**U73** Ditto. 1/25 sec F8 Super pan press. No sunshine this time. The center stem measures 6 3/8 inches from the bottom of the lowest pedicle to the topmost bud. The lateral sepals have a spread of 2 cm in the largest flowers – From the tip of the lip to the tip of the upright sepal is 16 mm. The column is 7 mm high 2 mm or less than the upright petals. The lip is about 7 cm.

	<p><b>U74.</b> A close up of part of a central spike almost natural size. ½ sec. F10 super pan. No sunshine. 6x9 cm. The stem, the ovary distinctly purple as compared with the yellow and brown of <i>C. Multiflora</i>. Our sample of “Wine Red” comes closest to it. The upper part of the stem is not so deep in tone. The lip is a deeper purple than the rest of the flower, probably a little “Magenta” and possibly a little “Old Rose” added to the “Wine Red”. The lip is not solid purple, at the tip are two patches or lines of white with whitish or paler purple shadings towards the base. The column is distinctly yellow, rather pale, the upper part with purple lines and shading at the base. The inside of the widely spreading or reflexed lateral sepals is yellowish brown, the same is true to a lesser extent of what shows of the upright petals which lie in the concave of the upper sepal. The whole effect, therefore, is one of purple shades, yellow and yellow brown. The purple and yellow being quite conspicuous when the plant is in sunlight. The unopened buds and the backs of the sepals are brown with a suggestion of ? yellow and purple, “mahogany brown”, “Verona brown” and a little “Wine Red” would probably make it. The tips of the buds are darkest and brownest. The many colours and shades mentioned are blended and lined in a very delicate fashion. Seen through a magnifying glass the tissue glisten.</p> <p><b>U75.</b> Habitat picture of <i>C. Mertensiana</i>. 1/5 sec. F8 super pan. 6x9 cm. Dull light in woods. Fir, Lodgepole Pine, Mountain Ash, Vaccinium, Arnica, etc. Lowest sheathes much lighter in colour than upper ones.</p> <p><b>U76.</b> <i>Corallorrhiza multiflora</i>. Group near those photographed earlier. 1/50 sec. F8. Super pan press. 5:20 pm. Mild sunshine illuminated the group standing between the dark grey rocks. General effect at 1 pm was a bright russet orange brown.</p> <p><b>U77.</b> <i>Helianthus (4871)</i>. At edge of wood on the bank of Jenny Lake. 1/5 sec. F22. Super pan Press. The rays are a bright gold, centers orange-yellow, foliage a fresh, rich, somewhat yellowish green. Whitish flowered tall Phacelia shows and perhaps Eriogonum. Entry <b>4871</b> from the Field Note Book (applicable to plant photograph <b>U77</b>). <i>Helianthus</i>. A perennial species at edge of woods and in open woods, Jenny Lake.</p>
<p><b>Friday 1 July, 1938</b></p>	<p><b>Travel day. Grand Teton National Park to Yellowstone Park and West Yellowstone overnight.</b></p>
<p>MM</p>	<p>Left <b>Teton</b> this morning drove to <b>Yellowstone</b>. It is a lovely drive with flower bestrewed meadows. Along part of Jackson Lake and through the Teton National Forest the road was very narrow making very trying driving. After entering the south entrance of Yellowstone park, \$3 entrance fee we had the deep canyon of the Lewis River to the right. Sun was to be seen in patches down at the water’s edge. As we drove along to W. Thumb where about at 8800 ft. higher we saw quantities of avalanche lilies. There was snow at the edge of the road in places. On the road from Teton Park the Gilia were the most beautiful we have seen, geranium, larkspur, eriogonum, lupine, senecio, and other yellow flowers were very lovely. Well on in the National forest the Gilia were left behind. There was plenty of arnica and paintbrush. The narrow winding road was like a winding trail through a forest – lodgepole pines etc., further north aspen poplar as well. Many patches of phlox. Soon after we entered Yellowstone a black bear crossed the paths. A mile or so further we saw two, and further along still another one. Got gas at <b>W. Thumb</b> 5 1/10 gal - \$1.35. We were just well started on our way towards <b>Old Faithful</b> when we struck very bad road conditions &amp; a little further on we came to more construction with a detour necessary</p>

	<p>which proved to be another narrow winding road, like an old one-way road. Altogether the driving this morning was very strenuous and Will was tired when we got to Old Faithful. Had our lunch, dried felts and changed a press. I saw the geyser erupt at 1:35, mailed a card to Mary. We drove over to watch Old Faithful erupt the next time. 2:46 – 48 ½ - 2 ½ minutes, a wonderful sight. Will collected a few plants. Said the Gentians were glorious on flats near Old Faithful. Lovely clumps of <i>minulus</i> en route to Madison. Many steaming pools. Little elephant. Gentians again along road in low spot. <i>Phacelia</i> thick on banks in fields. More steam rising. Phlox multiflora – very lovely. Dwarf Larkspur covering ground &amp; Erigonium. Giant thistles coming into bloom, a lovely ? color. Meadows both wet and dry, all covered with beautiful flowers. Lovely beardtongue, both blue and mauve. Met a car with a bashed front. Potentilla. Another gorge cut by the Firehole River. Long winding hill down the gorge – rocky banks, sheer cliffs. <b>Madison Junction.</b> Low parsnip in bloom. Balsam root. Labrador tea. Gorgeous blue beardtongue, also white. Madison River where John Colter hid from the Indians in 1808. First white man in Yellowstone and Teton. Met a brown bear ambling across the road. Placid. Antelope bush. Yellowstone is a very wonderful park with such variety of scenes, lakes, rivers &amp; mts. <b>Montana.</b> Went out the West Gate. The road from Old Faithful to West Entrance is quite good. <b>West Yellowstone.</b> Got gas 1829 mls. 10 gal. \$2.70. Staying here in Three Bear Lodge Cabins \$1.50. Raining again tonight. Rained hard &amp; we were glad to have a dry place to sleep.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>1.72</td> <td>W. Yellowstone</td> </tr> <tr> <td>Three Bear Lodge Cabins</td> <td>1.50</td> <td>W. Yellowstone</td> </tr> <tr> <td>Entrance fee</td> <td>3.00</td> <td>Yellowstone NP</td> </tr> </table>	Food	1.72	W. Yellowstone	Three Bear Lodge Cabins	1.50	W. Yellowstone	Entrance fee	3.00	Yellowstone NP
Food	1.72	W. Yellowstone								
Three Bear Lodge Cabins	1.50	W. Yellowstone								
Entrance fee	3.00	Yellowstone NP								
WCM	Nothing recorded.									
<b>Saturday, 2 July 1938</b>	<b>Travel day. West Yellowstone to Idaho Falls.</b>									
MM	<p>West Yellowstone. 6800 ft. alt. Raining this morning. Leaving at 10:35. No water falling at the moment but dark and heavy. Everything reeking wet. Large meadow looks like a landing field ablaze with flowers Lupine, erigonium, eriophyllum, etc. A long straight road between pines. <i>Pouring rain again.</i> Antelope bush, phlox, S. Fork Madison River. Little elephant in profusion in a wet meadow. Beautiful geraniums making a ? rosy white geraniums. Enormous thistles in high mt. Delphiniums. <b>Idaho.</b> Continental divide. El. 7078 ft. Targhee Pass. Columbo – numerous spikes for a long distance on the south side of Targhee Pass growing in most places with Geraniums. Balsam root. Wysteria as we got down lower over the pass. Large flock of sheep – a covered wagon for shelter for the sheep herder. Past the place where we lunched three yrs. ago and found white and yellow wysteria. <b>Targhee National Forest.</b> More lovely road between forests of Lodgepole Pine. Flat Rock camping ground, etc., ? on edge of woods, ceononthus, chokeberry, larkspur. White wysteria. Ponds Lodge Camp on Buffalo River – stopped just past here, forest camp, for a Columbo 31 mls. south of W. Yellowstone. Field of wysteria (yellow). After a little let up, heavy rain again. Met two on a motor cycle who are getting soaked. <i>Very heavy</i> – wipers barely kept shield clear, lights on. Brodiaea Douglasii. Another little let up in the heavy rain. Stopped for the Brodiaea. Blue beardtongue on rocks. Delphinium with Brodiaea &amp; geranium, lupine, potentilla, etc. Stopped again for a beardtongue, a lovely vista ahead with a mountain at end. Still driving among lovely trees. A little sunshine just now which is cheering 12:10 pm. Collected beardtongue &amp; potentilla 48 mls. from W. Yellowstone El. 6250 ft. Sunflowers probably like Teton ones. <b>Grant View Point.</b> Didn't go this time. Too wet. Meeting lot of cars evidently heading for Yellowstone for the long weekend. On the long hill where we first</p>									

	<p>saw Gilia – patches on the banks above road. Roses. Leaving Targhee Forest almost 60 mls. in forest. Splendid bridges. After a long winding hill up and down we emerge on a different scene – farming country with green fields spread out before our view. Large fields of peas in bloom. <b>Ashton</b>. Fair sized town. Bright fire weed. Cactus. Sunflowers, geranium, crepsis very gay. <b>Chester</b>. Small place. Fine potato fields. Rain again – very black sky ahead. Heavier than ever coming in sheets. <b>Snake River</b> once more. <b>St. Anthony</b>. A nice town. Had lunch at a Café. Rain stopped just before we reached the town. Large showy milkweed. <b>Sugar City</b> again. At <b>Thornton</b> where we turned on the detour there was a fearful muddy spot crossing the tracks. Muddy and rough all through the detour. Stormy looking again. Another heavy rain 2:40 as we approach <b>Rigby</b>. Stopped after passing the town. Reached <b>Idaho Falls</b> in light rain. Went to the P.O. only to find that the General Delivery closes at 12 on Saturday. Took our same No. 20 cabin at Smith Cabins &amp; will stay here over Sunday. Got some food.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Lunch</td> <td>1.10</td> <td>St. Anthony, Idaho</td> </tr> <tr> <td>Food</td> <td>2.00</td> <td>Idaho Falls, Idaho</td> </tr> <tr> <td>Smith's Cabins</td> <td>1.50</td> <td>Idaho Falls, Idaho</td> </tr> </table>	Lunch	1.10	St. Anthony, Idaho	Food	2.00	Idaho Falls, Idaho	Smith's Cabins	1.50	Idaho Falls, Idaho
Lunch	1.10	St. Anthony, Idaho								
Food	2.00	Idaho Falls, Idaho								
Smith's Cabins	1.50	Idaho Falls, Idaho								
WCM	Nothing recorded									
<b>Sunday, 3 July 1938</b>	<b>In Idaho Falls.</b>									
MM	Rained hard again through the night and off and on this morning. Changed driers on two presses last night and two again this morning. Had a fire in the stove – very good coal. Wrote to Helen and Fred. Will photographed details of the Columbo collected yesterday. Has rained all day.									
WCM	<p><b>U78. <i>Frasera speciosa</i></b>. Details of flower spike collected yesterday along the road 31 miles south of West Yellowstone in open Lodgepole Pine forest. The plant grows on open grassy slopes and in grass among scattered trees. At this place the plants seemed to have passed their maximum bloom. Some of the flowers at one of the lower nodes with a medium sized stem, almost natural size. 8 sec. F11 superpan. 6x9 cm.</p> <p><b>U78.</b> B/w photo at MN. V2.5.46</p> <p><b>U79.</b> Flowers on another stem about 80% nat. size. 15 sec. F16. Super pan. 6x9 cm.</p> <p><b>U80.</b> The same flower cluster and a part of the next node above, about ½ nat. size. 12 sec. F16. Superpan. Stems and foliage are a rather pale green, distinctly lighter than the grass among which they grew, stems are decidedly paler than the leaves. Calyx is green like the leaves. The four petals alternate with the sepals, are a pale greenish white, spotted with purple or violet. Each petal bears two glands near the base and these are green below covered with white wool. The centre of the petal above the gland is greener than the rest. The glands are partially hidden by fringes of hairs which are attached near the base of the petal. The pistil is as green as the leaves, filaments are whitish green and anthers are dull yellow. The stamens stand out stiffly between the petals at an angle of about 45 degrees. In the second stem photographed the flowers are paler and the spots not so pronounced. In the first a few of the flowers show pale purplish hairs on the glands. For arrangement of flower clusters see the pressed specimens.</p> <p><b>U80.</b> B/w photo at MN. V. 1.9.11</p>									

<b>Monday, 4 July 1938</b>	<b>In Idaho Falls.</b>												
MM	<p>The "Glorious Fourth". Sounds of cracking, fire crackers all the three days. Did a washing between rains. Will changed felts inside, washed car. Took a walk in evening in residential part. Clear at night. Some very fine houses, schools and churches.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Lunch</td> <td>1.10</td> <td>St. Anthony, Idaho</td> </tr> <tr> <td>Food</td> <td>2.00</td> <td>Idaho Falls, Idaho</td> </tr> <tr> <td>Smith's Cabins</td> <td>1.50</td> <td>Idaho Falls, Idaho</td> </tr> <tr> <td>Laundry</td> <td>0.20</td> <td></td> </tr> </table>	Lunch	1.10	St. Anthony, Idaho	Food	2.00	Idaho Falls, Idaho	Smith's Cabins	1.50	Idaho Falls, Idaho	Laundry	0.20	
Lunch	1.10	St. Anthony, Idaho											
Food	2.00	Idaho Falls, Idaho											
Smith's Cabins	1.50	Idaho Falls, Idaho											
Laundry	0.20												
WCM	Nothing recorded												
<b>Tuesday, 5 July 1938</b>	<b>Travel day. Idaho Falls to Twin Falls.</b>												
MM	<p>Got mail at the P.O. First since we left home. All well at home. Were glad to hear at last. Hope next mail will be good. Mother not well. Will got the car checked over before we left. Got packed up &amp; away at 10:30. Bright so far. Letters said rain was needed at home! Raining before we got to Blackfoot. Not for long. <b>Blackfoot</b>. Saw some Indians. Reserve through here. Union Pacific Pass. train went by. Historic marker. Sunshine again. <b>Pocatello</b>. Got gas at 2003 mls. 12 gals. 2<sup>nd</sup> city in Idaho. University here. A bus ahead had its right wheels off pavement in mud &amp; the others on left were raising dust. On Highway 30. <b>Power County</b>. Passed Western Air Express large aviation field. Sage brush fields. Can see Twin Buttes &amp; Big Butte – off to the north. Annual sunflowers. ? just a railway shed. This road is much like the road to Arco. Fine overhead bridge over the RR. Blue hills ahead with fine clouds. <b>American Falls</b>. Snake River in sight. There is a dam at the Falls. A meadow lark greeted us. An irrigated grain field on one side &amp; a sage brush plain on the other side of road. Stopped for lunch along the Snake River, a lovely view of it at a big bend with an Island in the middle. Will took two Graflex photos. One looking up and the other looking down stream. Water is swift, a lovely green blue color quite different from the muddy Snake we saw two weeks ago at Jackson, Wyoming. Sage brush, juniper, a little ? , cactus, plantago are growing here. 32 mls. west of Pocatello, skeleton weed, fine rose colored blossom, squaw wood Rhus, ? in fruit. On our way at 2:25. Following along the river. Indian Massacre Rocks. Historic point. Through here the rocky appearance is something like we have seen in Washington. Climbed a winding hill &amp; came upon a broad far view miles of panoramic scene with the river in the distance. Then another winding hill. <b>Cascade County</b> Quantities of milkweed in low places. Beautiful clouds this afternoon. Vast unbroken stretches of sage brush plains. Graflex 1/50 F12.5 Isos 2 sunshine. Sage brush and clouds looking N.W. The river in the distance 60 mls. from Pocatello. Native tobacco growing by roadside. <b>Minidoka Co.</b> Crossed the Snake River. Very wide. Heavy rain again. <b>Rupert</b> – a rather spread out town. Stopped raining for the present. Sugar beets, grain, Electric train on Union Pacific. Crossed the Snake River again. <b>Burley</b> – red cherries ripe &amp; being picked. Splendid road all the way. Fine broad view Sagebrush, Mts., clouds. In what appears to be a beautiful piece of irrigated country – some fine views. <b>Murtaugh</b> – a little hamlet. Mallow. A most glorious sky. Some places working in beet fields in rubber boots? Large irrigation canals. A lovely farm home with garden flowers. <b>Kimberley</b>. A different landscape – fine field ? <b>Twin Falls</b> - a live city 8000+. Got gas. 6 gals. 2128 mls. Staying for the night at Wegener's Cabin Auto Camp. \$1.50 – same equipment as Idaho Falls, not quite so large.</p>												

		<b>Listed Expenses</b>		
		Food	1.18	Twin Falls, Idaho
		Wegener's Cabin Auto Camp	1.50	Twin Falls, Idaho
WCM	<p>Stopped for lunch about 32 miles west of <b>Pocatello</b>, Idaho, on 30N Highway where the Snake River makes a big loop.</p> <p><b>U81.</b> Looking upriver between dark masses of rock. The slopes are covered with dried grass, a yellow brown, Sage Brush with bright new growth and Junipers also with new growth making them brighter green than of other seasons. Some of the shrubs bore very heavy loads of unripe blue green fruit. Clouds mostly blue grey: the river water green blue. It breaks into foam at rapids in the middle distance. 1/50 Sec. F11. Isos 2. Super sensitive Graflex.</p> <p><b>U82.</b> A view down the river, more foreground showing Juniper and Sage. A round island dividing the stream shows in the background. 1/50 Sec. F9. Isos 2. Graflex.</p> <p><b>U83.</b> Sagebrush and sky. 1/50 sec F12.5. Isos 2. Moderate sunshine. We drove through many miles of this Sage brush country. There were very few flowers. The wild tobacco was abundant at edge of road where the picture was taken, 60 mls. West of Pocatello.</p> <p><b>U83.</b> B/w photo at MN. V. 2.7.21.</p>			
<b>Wednesday, 6 July 1938</b>	<b>Travel day. Twin Falls to Boise, Idaho.</b>			
MM	<p>Leaving here after a good night at 9:00. This place is like a park with grass, trees, etc. and the cabins all around – about 40 of them. Drove to <b>Shoshone Falls</b> about 5 miles from <b>Twin Falls</b>. It is a very beautiful horse shoe falls where the Snake river tumbles over a precipice maybe 90 ft. high. The cliffs are similar strata to those in the Grand Coulee, rough &amp; weathered looking. There is a little gem of a lake here among the cliffs behind the falls. Will took several photos. We were on the cliffs above looking down but did not drive down though it is possible to do so. Collected some plants. The homes of the officials connected with the power plant are most attractive looking, being set in against the cliffs away across the river and kept looking emerald green with grass, trees &amp; shrubs. Collected small waxberry, stunted "Mountain Spray", a skeleton like cogswellia, a fine skeleton weed, a Veronica growing by a little stream quite upright, a weedy "Ambrosia" collected near edge of stream but seen in drier places. Driving on a State Highway through good farming district, irrigated of course. Fields of onions, beets, etc. Pear and apple orchards where many trees are affected with 'the Yellow'. Saw trees in Idaho Falls and elsewhere also affected. Large maple trees turning yellow. Now on U.S. 30 again. A lovely bright morning. <b>Filer</b>. A good country town. A very good agricultural, well settled part. <b>Buhl</b>. Quite a town – Kiwanis, Rotary, etc. Nice cabin park on east side. Seago milk factory. Bull rushes in wet ground. Long hill winding down into a broad swing to the river. Waterfalls, narrow ribbons coming right out of the rocks across the river. Many of these make a remarkable sight, some falling as it were among the green trees, 2 longer falls at side and others between. [Sketch here in original]. Called <b>Thousand Springs</b>. Further along the river are more waterfalls. 12 at least I can see from where we are parked by the highway. Smaller seem to gush out all along this bank. [Added later: A book on Idaho says that these springs gush from The Big Lost river which has flowed for 100 mls. underground, buried I presume by the lava.] Grease wood growing along the road. Collected. Will has gone across a green field down to the river to try to get a picture of some of these falls. Exposed two films. Crossing the Snake river again. Rocky banks thick with mallow. Bull rushes very high. Lombardy poplars. <b>Hagerman</b>. Fields of rye dried and stooked. Markers of historic events in Idaho shaped</p>			

like this state. Idaho water power plant. **Malad River**. Clematis, Yellow Cleome. Stopped for lunch about 1:00 on a gravelly place where we dried some felts. 50 mls. West of Twin Falls. Hot bright sun. Spring falls seeming to come out of the top of cliff fall a little way and then disappeared into & behind the cliff. Grape Vines. A yellow plant couldn't stop. **Bliss**. 3265 ft. el. Small town – through sage brush country again. **King Hill**. A small hamlet – the river. Stopped on a long hill for the yellow plant seen before. **Glenn's Ferry** – nice shady street, nice conifers road uphill and down dale along the river. Farming again in this valley. **Hammett** – a small town. Sage brush again. Go N.W. now to Boise away from the river. **Mountain Home**. Sage brush. Long straight stretches of good road not a great deal of traffic this afternoon. 54.0 + 5 ml. = 59.0 Speedometer just right. A little white church in the desert. I wonder where the parishioners live. Stopped for a yellow plant and collected thistle, *Eriogonum*, *Eriophyllum*, another *cogswellia* in fruit, balsam root in fruit, about 16 mls. east of Boise. Boise in the distance looks green and lovely with its trees & domes and roofs rising above green fields outside the city. Irrigation canal. **Boise**. Passed the Union Pacific depot, an attractive well kept place with a rock garden. Staying at "Bob's Park" – an auto cabin place, quite large. Cabin much as we have had not quite so large perhaps. \$1.75 here. Went to the P.O. and got four letters, very acceptable. We were glad there was no bad news from mother & hope she is picking up. Mailed a letter at the station to the girls in Calgary. Pressed the plants collected today.

**Listed Expenses**

Food (6 & 7 July)	2.64	Boise, Idaho
Bob's Park	1.75	Boise, Idaho
Postage	0.02	

WCM

**U84**. View of Shoshone Falls from above. 1/65 sec. F16. Graflex.

**U84**. B/w photo at MN. V. 2.8.33



U84 Shoshone Falls of Snake River in Southern Idaho

	<p><b>U85.</b> Another very much the same with Zeiss, showing the generating house at the left with the homes, green-roofed and surrounded by green lawn and trees in striking contrast to the desert-like character of the locality. All of the Falls is shown. The general ground color was warm yellowish brown and the lava rocks very dark. 1/50 Sec. F10. Superpan.</p> <p><b>U86.</b> A view of the Falls themselves using Distar lens. 1/50 Sec. F10. Superpan.</p> <p><b>U87.</b> A view of the bank of the Snake River from the opposite side showing the water of Big Lost River falling into the stream. These white cascades are surrounded by rich green vegetation giving a very striking effect. 1/25 Sec. F12.5. Distar. Bright sun from right about noon.</p> <p><b>U88.</b> A group of other of these waterfalls. 1/25 Sec. F14. Distar. Sun pretty well behind the camera. This place is called The Thousand Springs.</p>									
<b>Thursday, 7 July 1938</b>	<b>In Boise, drove up to Arrowrock Dam.</b>									
MM	<p>Had another good night. Have decided to keep this cabin for another night. Will has gone to try to get some information that will help decide our next move. The first trip is to Arrowrock Dam 24 mls. from Boise along the Boise river. In the rugged parts saw Elderberry, Clematis, milkweed. Shelf road rather rough between cliffs &amp; swift running water. 6 mls. bad. Further along the road was very rough, narrow &amp; steep in spots. Miserable driving. The dam itself is quite a piece of work alright, but not so imposing of course as Boulder or Grand Coulee. Will found a pretty Mimulus growing on the steep bank also a little yellow parasitic plant. Took a photograph of the spillway. Coming back stopped along the river for a Mariposa growing on a steep bank above the road. Currant in fruit. There was some golden rod in bloom this early. Brown Sage brush hills. Some rough basaltic formations making rugged cliffs. Came back to the cabin for our lunch. It is a hot day. Wrote to Ethel &amp; Dencie also a card to Edith after we got two more letters from her with enclosures from Helen. Everything is all right so far at home. We got some food down town also gas at 2337 – 12 4/10 gals.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>2.00</td> <td>Idaho Falls, Idaho</td> </tr> <tr> <td>Bob's Park</td> <td>1.75</td> <td>Boise, Idaho</td> </tr> <tr> <td>Postage</td> <td>0.02</td> <td></td> </tr> </table>	Food	2.00	Idaho Falls, Idaho	Bob's Park	1.75	Boise, Idaho	Postage	0.02	
Food	2.00	Idaho Falls, Idaho								
Bob's Park	1.75	Boise, Idaho								
Postage	0.02									
WCM	<p>[Interestingly WCM photographed the spillway of Arrowrock dam, but there is an X across the notes, indicating that it was poorly taken or it did not come out. Details follow.]</p> <p><b>U89.</b> Photograph of the spillway of Arrowrock Dam from the Bridge. 1/50 Sec. F11. Isos 2. Bright sun overhead and slightly in front, 12:20 PM. Superpan. The unbroken water as it slips over has a distinct greenish tone.</p>									
<b>Friday, 8 July 1938</b>	<b>Travel day. Boise to Pendleton, Oregon</b>									
MM	<p>Hot again. Leaving at 9:00. Left address Crater Lake at P.O. Travelling 30 U.S. Highway. Crossed Boise R. – fine bridge. <b>Boise</b> a fine city. Drove along past some handsome solid imposing homes with lovely grounds. Walnut trees along street. Tree of Heaven. Lots of Poplar, Locust. Cloverdale Memorial Park. A beauty spot along the Highway. <b>Meridian.</b> Catalpa trees in bloom. Cherry trees red with fruit. Farming country through here.</p>									

**Nampa.** A city like Idaho Falls. **Caldwell.** College of Idaho summer school. Lovely shady wide street – nice large town. Fine cabins at both ends of city. Sage Brush & some irrigation just out of the city. Now a few miles further on nothing but desert in sight. All through the desert country it is rabbits that meet death on the highway. A new irrigation canal being constructed. **New Plymouth** – irrigation – apples, corn, etc. Oats turning white. Apples blue with spray. **Fruitland** 2400 mls. we crossed the Snake R. again into Oregon. **Ontario.** A nice shady town. An orchard alternate rows peaches & apples. Broad fertile valley. Sage Brush hills in distance. Large Landing field. Desert again – yellow cleome. Pure sand some places – some green bush growing here & there. Driving along the Snake R. Sand swallows flying out of their nests in the sandy banks. Field of wheat stooked. **Baker County. Huntington** – changed to Pacific Time. Clematis. **Lime.** A large mfg. plant like cement works. Cross Burnt R. 3 times + Wild Licorice. Sumach, Elderberry. Rapids blasted out through rocks. R.R. goes through tunnel. Hills rise high along here, winding road in and out among them, up and down. **Durkee** – small hamlet. Lunched under White Poplar tree along road. Few places to get off. Juniper showing on the dry bank. Lupine, mallow – neat looking lupine. **Baker** – a fine large town. Mountain showing up to the west. Blue Mountain. Very hazy. Driving through a fertile valley. New sage. Purple mallow. Purple cleome. **Haines** – small town. Piece of rough gravel road 6 mls. 2500 mls. Car supposed to be well broken in now. **North Powder.** Golden rod, and milk weed winding among hills again. Some narrow defiles mark high rough rocky slopes. Many travellers this afternoon along the road hopefully pointing their thumb. **Union.** Blue Mt. Inn, a large ? hotel. Fair sized town. More trees with almost white foliage. Farm lands again – broad flat valley. **Hot Lake Sanitorium** right along the road – pond lilies with pinkish buds, probably plants, ? cockle. The Blue Mountains across the valley all through here. **La Grande** – got gas at 2533 mls. (10 gal) \$2.74. Had a milk shake and registered as required in Oregon. This is an attractive city, nicely situated. Mountain Spray. High hills are wooded, w. pine & spruce, larch – stream of sparkling water along the road at base Grande Ronde river: 3 times across +. Mock orange in fine bloom. Larch tree. Train load of logs of yellow Pine. Mountain Spring Cabins. Driving over the Blue Mountains. Very pretty mountain road, a nice change from so much sage and desert. Stopped on the way up for a beardtongue blue columbo in fruit, likely the same as we got, 10 mls. from La Grande. Erigonium covering the banks. Summit of Blue Mountain Pass – 4335 El. Bright warm but windy. Have seen 8 large double trucks – Consolidated Freight – today. Will went looking for flowers & found the lovely red & yellow Columbine, also the blue beardtongue, a little everlasting, mt. spray, very lovely. Ceonothus on summit. Edge of Union Co. Umatilla Co. White California Hellabore. Just as if driving through a park. Fine road. Indian paint brush – bright red. **Meacham** – a small mt. town. Northern ? **Emigrant Springs State Park.** Camping grounds with wood piled up. Along this road over the Blue Mts. the undergrowth is all cleared out, grass grows right up to the trees, no weeds. Western yellow pines. No peaks or mts. visible on either side. **Umatilla Indian Reservation.** From this spot there was a gorgeous view looking out over hill and valley. Folded hills. Summit of Emigrant Hill. 3800 ft. Will photographed this scene. Graflex – 1/65 sec. F9. Isos 2. 4:25. Collected here & a large Erigonium plus a number of weeds. Running down the opposite slope 50 mls. or more without any gas. Marvellous panoramic view of the valley, a horse shoe, hundreds of ft. below. To get to **Pendleton** we have to go down 2000 ft. An excellent road. Switchbacks many of them. A very delightful drive all the way. Wheat fields & summer fallow form a checker board effect – ripe wheat. Indian encampment – some sort of pow-wow on Mission – an Indian Mission I expect. **Pendleton.** Staying here in cabins at extreme west end - \$2.00, pretty high, the

	<p>accommodation is good. Breakfast nook, sink, electric two plates, toilet &amp; shower, good sized room with bed, table, etc. Looked at other cabins at the east end, didn't care for their appearance. Boyd's Round Up Auto Park. Has been a hot day – came 253 mls. today. The 57 miles from La Grande to Pendleton has been one of the most enjoyable drives so far. The park-like aspect with the very excellent highway, the outlook from the summit, the wonderful drive down the western or northern side with the panoramic view of the valley a way below will always remain a happy experience.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Boyd's Round Up Auto Park</td> <td>2.00</td> <td>Pendleton, Oregon</td> </tr> </table>	Boyd's Round Up Auto Park	2.00	Pendleton, Oregon
Boyd's Round Up Auto Park	2.00	Pendleton, Oregon		
WCM	<p><b>U90.</b> View from the top of Emigrant Hill 3800 ft. el. On the Blue Mountain Pass. 1/65 Sec. F9. Isos 2. Bright sun from side. Somewhat hazy in distance. Graflex.</p>			
<i>Saturday, 9 July 1938</i>	<p><b>Travel day. Pendleton to Redmond, Oregon</b></p>			
MM	<p>Leaving at 8:45. Pass Eastern Oregon State Hospital just outside Pendleton. Bright again this morning with a little fresher air. A fine night for sleeping. Hazy. Can't see very far off. Beautiful wheat fields on the hillsides and fields – ripe for cutting. Wheat even along the roadsides – whether planted or volunteer it is a uniform crop. A straight good road through miles of wheat. Other fields ready for this fall's sowing. Some sort of a combine working. Alfalfa hay baled – quite green looking. <b>Stanfield</b> – small town. A desert again just past Stanfield. Nothing much but dried up grasses &amp; scattered sage brush 3 mls. or more. Antelope bush, white evening primrose, chicory. <b>Hermiston.</b> Small town. Mostly waste land through here – some farm buildings in sight to the right here &amp; there. Wild carrot, teasle, bulrushes, golden rod. <b>Umatilla.</b> A small town. Have reached the Columbia River driving on what is known as the Columbia highway. White evening primrose, yellow cleone. <b>Irrigon.</b> Small hamlet. 43 miles in an hour this A.M. Sage brush to the right &amp; left of us away from the river for some miles. Tree of Heaven planted, some doing pretty well, some in fruit. <b>Boardman.</b> White looking trees again. Got on top of Lewiston hill last yr. Farms again along the river. Locust trees in bloom. River a broad placid looking stream rather muddy. White sand verbena in abundance, also white evening primrose almost bordering the road. Passed an Alberta car – one of the few we have seen. Pure sand along here, sage brush. <b>Arlington</b> in a hollow down quite a steep hill. Got a little food. The road then winds up out of the town &amp; one drives along a shelf well above the river. Tree of Heaven bordering the road along this shelf – rocky slope. Rocky outcroppings on both sides of road in places. Winding with lots of sharp curves. John Day river at last reached its end &amp; emptied into the Columbia. Some beautiful views of the river with its rugged banks on each side from this highway. White patches made by rapids here &amp; there. <b>Rufus.</b> 2700 miles. Extensive wind breaks of Lombardy poplars. Now at <b>Biggs Junction.</b> Turned on 97 south – a narrower road – winding among hills driving out of wheat lands again. <b>Wasco.</b> A little town among the hills. Fine views of the country from a high hill – rolling fields of grain in various stages, mostly ripe. <b>Moro.</b> A nice little town. Got gas at 2723 mls. 9 <sup>9</sup>/<sub>10</sub>. Saw one of the travellers of the road being picked up. The last two days we have got 24 ½ mls. to the Canadian gal. The road is climbing higher all the time. At Arlington we were about 300 ft. el. Now 2000ft. <b>Grass Valley.</b> Another little country town. Shady. Stopped for lunch under the shade of a Manitoba maple, a nice cool spot. 144 mls. from breakfast. Locust trees planted in some places along road. Off in the distance on the skyline saw an Elevator – a familiar sight. Stopped for an Eriogonum gone to seed. 2700 ft. el. Also growing there: chaenactis, grass weed, lupines and saw bright purple little daisy. Junipers farther along. 3000 ft. el. Mariposa lily. <b>Shaniko</b> – a small town 3300 el. Gravel for 10 miles oiled surface, not bad at all. Rabbit bush in flower. Yellow. Scattered</p>			

	<p>Juniper showing on the brown hills. As we go south the Junipers are thicker on the hills – slopes, sage brush. <b>Cow Canyon.</b> A long winding, twisting road down and down between hills with juniper above the shelf road. On the bank was a bush covered with bright red berries, also a pink flower Will thinks is a beardtongue he wants very much. We couldn't stop, unfortunately. Dropped 600 feet or more. Also saw mariposa near the start of the canyon. Stopped to examine the juniper tree. Hay making in fertile spots. Crossed Hay Creek. Mountains in sight ahead. One high peak with snow. Might be Mt. Jefferson. 10,495'. Met another Alberta car. Stopped for a Mariposa, same as at Boise. After 41 miles coming into Madras. <b>Madras.</b> A small country town. Country after this is varied, sage &amp; juniper &amp; some fine wheat fields. Mts. in distance to west. As we climbed one hill three castle-like formations came into view, rugged &amp; striking. Crooked River Gorge. A deep gorge spanned by a steel arch bridge with a concrete top. [Note at top of page: Peter Skene Ogden who explored central Oregon early in 19<sup>th</sup> century discovered this Crooked river &amp; a park is set apart there in his memory. Inscription on bridge.] A very deep canyon with a small rapid stream below, bright green vegetation away down along the water. Dark rugged cliffs on both sides. Will photographed. Drove along by a Juniper forest, the nearest to a forest of Juniper Will said he had ever seen. Sage &amp; farming, mostly farming as we came to Redmond. <b>Redmond.</b> Live town of 1000 pop. A nice time where we are staying in Stone City Cabin Court, a very good cabin, 2 rooms, and a bathroom with a bath tub! Hot &amp; cold water. \$1.50. A very comfortable &amp; spacious cabin. A tiny car-like truck from Georgia. Two small people in it. We had the car greased here at 2831 mls. Got gas.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>0.85</td> <td>Arlington, Oregon</td> </tr> <tr> <td>Food</td> <td>3.50</td> <td>Redmond, Oregon</td> </tr> <tr> <td>Stone City Cabin Court</td> <td>1.50</td> <td>Redmond, Oregon</td> </tr> </table>	Food	0.85	Arlington, Oregon	Food	3.50	Redmond, Oregon	Stone City Cabin Court	1.50	Redmond, Oregon
Food	0.85	Arlington, Oregon								
Food	3.50	Redmond, Oregon								
Stone City Cabin Court	1.50	Redmond, Oregon								
WCM	<p>[WCM photographed the Crooked River gorge, but there is an X across his notes, indicating that it was poorly taken or it did not come out. Details follow.]</p> <p><b>U91.</b> Crooked River Gorge. 1/25 sec. F11. Isos 2. Sun pretty well behind my back. One side of gorge is in complete shade.</p>									
<i>Sunday, 10 July 1938</i>	<b>Travel day. Redmond to Crater Lake National Park</b>									
MM	<p>9:00 A.M. Leaving <b>Redmond</b> for <b>Crater Lake</b>. Off to the west we can see a range of mts. with 5 or 6 snow-capped conical peaks. Gnarled trunks of Juniper mark them as veterans. Lovely air, not too bright sun. Stopped by a Juniper spotted, sage bush &amp; rabbit bush plain with snow capped peaks in the background, for a photograph. Collected some dry desert plants 3 mls. S. of Redmond. There snow-capped peaks probably the north, middle and south Sisters. 10,000 ft. alt. Eriophyllum in pretty bright yellow patches with sage, juniper, &amp; mullein. Juniper the feature – a pure stand of juniper forest. An occasional farm &amp; hay seems the crop – a few herds of cows. A fire blazing fiercely as we enter <b>Bend</b>. <b>Bend</b> 8000+/- 3600 el. Good auto courts. At Bend the Ponderosa Pine begin to mix with the juniper &amp; soon replaces it. Stopped to look at a red berried plant – collected currant, same as at Wanatchee [Wa.] 3800 ft. Collected blue beardtongue (new) – 4000 ft, 8 mls. S. of Bend. A few mls. further we stopped for a new Mimulus &amp; another new plant among antelope bush out of bloom &amp; ceanonthus. The red gilia beginning. The road bordered in places with the pretty mimulus. Quantities of ceanonthus bushes just out of bloom, Blue beardtongue, fireweed. See a look-out station on top of a high hill – Laurel Butte. Fine Ponderosa Pine forest. Piles of lava rock – mt. spray. 4000 ft. Stopped at the <b>Lava River State Park</b>. Paid 35 cents for a</p>									

	<p>gas lantern to light us down into the cave. A long subterranean tunnel with a sand bottom, the vaulted roof, sometimes 20 ft. high, sometimes less, and sometimes more in different parts, and the walls are almost smooth, remarkably so, of course they are not uniformly so, but in general. The path narrows as we go on. More than half way are what they call Sand Gardens. Formations in the sand, natural of course. In places there is what the Caretaker called a Miniature Grand Canyon – formations in various shapes forms with gorges etc. Will says one could make a photograph taken there with strong flash lights onto like cliffs? Brought a bit of the lava rock. Mimulus again bordering the road growing right out of the hard gravelly soil. Very dry through here. Driving through Lodgepole Pine forest 4200 ft. el. Blue beardtongue – large and small. <b>Lapine</b>. A few buildings – gas station etc. Fragrant with pine odor. <b>Klamath County</b>. Yellow mimulus along a little cut ditch. Paint Brush. Road dusty through here – pavement again. Yellow Pine with Lodgepole. Pine barrens – nothing else for miles. Sign – look out for deer crossing highway but we didn't see any. <b>Crescent</b> – cabins &amp; gas station. Lunched among the pines here. Entering Deschutes Natl. Forest. Fine small beardtongue making blue patches. Antelope bush still. Low lupine. Stopped to collect. Also eriogonum &amp; some other dry plants about 48 miles N. of Crater L. <b>Chemult</b>. Mostly cabins &amp; gas station. Leaving Deschutes Natl. Forest. Red top Dock. Little mimulus again. Turned west on 230 Highway to the north entrance of the Park. A long straight away as far as we can see. Tiny little pine trees thick along the roadside. Collected small beardtongue. 4500 alt. Entering Rogue River National Forest. The Eriogonum in the woods make a lovely touch of color. Logging camps, narrow gauge tracks through woods. Both kinds of Pine along this road. Alt. 5650 stopped for small lupines. Summit Cascade Mts. 5930 ft. Umpqua Natl. Forest. As we turn south towards <b>Crater L.</b> N. entrance a fine sun capped mt. at end of the road. Entering Park – 6000 ft. Hemlocks. Snow right down to road &amp; among trees on the slopes. Banks of snow melting &amp; running down over road way. Driving right through a winter scene with snow on ground. Trees among it very striking. Stopped to register at Ranger station. 1/65. F 6.3 Isos. Graflex 1/20. F 16 Isos. Graflex 7500 ft. alt.</p> <p>Our first view of the marvelous lake. The color is the most wonderful deep indigo blue. Much snow all around. Lake is a long way below the road. Said to be 1000 ft. down. Saw alpine anemone, phlox, eriogonum, a little pink flower on the rock below, maybe saxifrage. The island in the lake looks like a volcano with a crater bowl at the top. 7800 ft. Will photographing a tree, sky &amp; snow. Came to the centre of things – The Rim Village. Have taken a cabin here &amp; plan to stay awhile. The camp ground is mostly covered with snow. There are some clear sites but we think we'll be safer in the cabin. \$2 a night; \$12 a week. Went to Headquarters where Will saw the head naturalist who was very cordial &amp; will give him a permit tomorrow. There is also here a Botanist from California whom Will expects to meet tomorrow. Went to the program at the Lodge – a lecture on the sounding of the Lake by the chief naturalist, Mr. John Doerr – very interesting. There is a musical program by some of the Lodge people. The assembly room there is rustic finish with a big fireplace. The Post Office is in the Lodge.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Lantern</td> <td>0.35</td> <td>Lava River State Park</td> </tr> <tr> <td>Crater Lake Cabin</td> <td>12.00 (week)</td> <td>Rim Village, Crater Lake NP</td> </tr> </table>	Lantern	0.35	Lava River State Park	Crater Lake Cabin	12.00 (week)	Rim Village, Crater Lake NP
Lantern	0.35	Lava River State Park					
Crater Lake Cabin	12.00 (week)	Rim Village, Crater Lake NP					
WCM	<p><b>U92.</b> <i>Juniperus occidentalis</i> Hook. Junipers a few miles south of Redmond. 1/50 sec. F9. Isos 2. The tree near the centre has a spread of about 36 ft. and a trunk 2 ft. in diameter.</p> <p><b>U92</b> B/w photo at MN. V. 2.51</p>						

**U92.** Specimen may be found at UA Herbarium Museum

### Specimen Details

**Record Type:** specimen; photograph

**Family:** Cupressaceae

**Scientific Name:** *Juniperus occidentalis* Hook.

**Collector:** McCalla, William C.

**Collector Number:** 04910

**Date Collected:** 1938-07-09

**Locality:** North America: United States, Oregon, Jefferson County, Madras

**Site Name:** Cow Canyon, Madras area: Site 1

**Site Description:** Side of Cow Canyon, north of Madras, on Highway 97.

**Accession Number:** 32847

**U93.** Our first view of Crater Lake. 1/65 sec. F6.3. Isos2 (probably overexposed). Graflex.

**U94.** Another view of Crater Lake showing piled up snow, sunlit on the rim. 1/20 sec. F16. Isos 2. Grayflex.

**U94.** B/w photo at MN. V. 2.8.22.



**U95.** A view from much the same point but looking away from the Lake. Wind-beaten White-bark pine in the centre. A broad band of snow shows in the distance with mountains beyond and a splendid cloud-filled sky. 1/25 sec. F10. Isos 2. Sun in front, lens shaded.

<b>Monday, 11 July 1938.</b>	<b>At Crater Lake National Park.</b>																																		
MM	A lovely bright morning with white fleecy clouds. The sun warm but the air delightfully cool. Changed & dried felts, wrote to Edith & Louise, went to see The Sinnott Memorial – a series of binoculars set a different positions to let one see the various interesting things about the wall of the crater & the lake. The latter is an indescribably blue in the morning sun. In the afternoon we drove down towards the southern part of Park about 7 mls. Got some photographs of <i>Dicentra</i> (bleeding heart) and collected some plants. We haven't seen the botanist yet but Will has permission to take plants. Has been a beautiful day. Went to the program at Lodge.																																		
WCM	<p><b>U96.</b> <i>Dicentra Formosa</i> D.C. On a steep volcanic sand bank by the roadside. 1/25 sec. F16. Superpan. Bright sunshine.</p> <p><b>U97.</b> Another group of <i>Dicentra</i> on a rocky bank below the Administration headquarters. A large log with the bark off forms part of the background. 1/25 Sec. F12. Bright sun on the group but more trees surrounding. See Botanical record for description.</p> <p><b>U97.</b> B/w photo at MN. V. 1.4.25.</p> <p><b>U97.</b> Specimen may be found at UA Herbarium Museum.</p> <table border="1"> <thead> <tr> <th colspan="3"><b>Specimen Details</b></th> </tr> </thead> <tbody> <tr> <td><b>Record Type:</b></td> <td colspan="2">specimen; photograph</td> </tr> <tr> <td><b>Family:</b></td> <td colspan="2">Papaveraceae</td> </tr> <tr> <td><b>Scientific Name:</b></td> <td colspan="2"><i>Dicentra formosa</i> (Haw.) Walp.</td> </tr> <tr> <td><b>Collector:</b></td> <td colspan="2">McCalla, William C.</td> </tr> <tr> <td><b>Collector Number:</b></td> <td colspan="2">04926</td> </tr> <tr> <td><b>Date Collected:</b></td> <td colspan="2">1938-07-11</td> </tr> <tr> <td><b>Locality:</b></td> <td colspan="2">North America: United States, Oregon, Crater Lake National Park, Crater Lake</td> </tr> <tr> <td><b>Site Name:</b></td> <td colspan="2">Crater Lake, Crater Lake National Park: Site 5</td> </tr> <tr> <td><b>Site Description:</b></td> <td colspan="2">Open woods and partially shaded banks at Crater lake</td> </tr> <tr> <td><b>Accession Number:</b></td> <td colspan="2">57683</td> </tr> </tbody> </table>		<b>Specimen Details</b>			<b>Record Type:</b>	specimen; photograph		<b>Family:</b>	Papaveraceae		<b>Scientific Name:</b>	<i>Dicentra formosa</i> (Haw.) Walp.		<b>Collector:</b>	McCalla, William C.		<b>Collector Number:</b>	04926		<b>Date Collected:</b>	1938-07-11		<b>Locality:</b>	North America: United States, Oregon, Crater Lake National Park, Crater Lake		<b>Site Name:</b>	Crater Lake, Crater Lake National Park: Site 5		<b>Site Description:</b>	Open woods and partially shaded banks at Crater lake		<b>Accession Number:</b>	57683	
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<b>Tuesday, 12 July 1938</b>	<b>At Crater Lake National Park.</b>																																		
MM	<p>Another lovely day, warm &amp; bright. Dried felts &amp; changed presses, walked over to a bank lovely with phlox, a beautiful pink mauve. Photographed several plants. In afternoon enjoyed the view from the rim, the Lake was exquisite in the afternoon light with some fleecy clouds reflected in its mirror surface. The beauty of this Lake, the intensity of the blues is simply indescribable. It is a great privilege to see it. Will contacted Dr. Applegate this afternoon and had an hour with him. He also enjoyed the photographs. Went to the lecture tonight. It is pleasant to sit in the Lounge of the Lodge beneath the big stone fire-place for an hour in the evening. Got a letter from Helen today.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tbody> <tr> <td>String</td> <td>0.05</td> <td></td> </tr> <tr> <td>Food</td> <td>1.15</td> <td>Crater lake NP</td> </tr> </tbody> </table>		String	0.05		Food	1.15	Crater lake NP																											
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	Post Cards	0.15	
	Postage	0.25	
WCM	<p><b>U98.</b> <i>Ribes</i> [copper-colonial added in pencil afterwards]. Stem woody, warm brown, bud scales somewhat purplish, leaves a rather deep green somewhat dull in tone, flower stems and bracts green or lightly tinted with purple, sepals are a coppery red or brown, "Bismarck Brown" with a little "Deep Yellow", the small petals are much the same but inclined to be redder, indeed, seen through a magnifying glass the sepals also are variously edged or spotted with dark red. The centre of the flower is dark red, anthers creamy yellow. 4 Sec. F 16. Superpan. 6 X 9.</p> <p><b>U98.</b> B/w photo at MN. V. 2.3.25.</p> <p><b>U99.</b> Another of the same. The plant growing on a sandy, rocky hillside in open forest. 1/10 Sec. F18. Bright sun. 6 X 9.</p> <p><b>U100.</b> <i>Ribes cereum</i>. A branch in beautiful and dainty bloom brought into the cabin. 1 sec. F14. Superpan. Press.</p> <p><b>U101.</b> Ditto on 6 x 9 Superpan. 4 Secs. F16. About 40% natural size. The tubular corolla is nearly 1 cm. long. The foliage is somewhat grey green. The corolla a very pale pink like the sample "Japonica Scarlet".</p> <p><b>U102.</b> <i>Viola</i>. A tiny yellow violet on sand slopes recently uncovered by the melting snow. The leaves are a dark, dull, bluish green, the veins on the underside purplish, the stems of both leaves and flowers are somewhat purple tinted. Petals are deep and bright gold, the lower and lateral petals have dark purple lines, the upper petals are rather, strongly tinted with purple on the back. 1.2 Sec. F16. Plant shaded. 6 X 9.</p> <p><b>U103</b> Ditto in sunshine. 1/10 sec. F22. 6 x 9. The whole group is 3 ½ inches across.</p> <p><b>U104.</b> <i>Phlox Douglasii</i>. A beautiful display of the phlox on a sandy and rocky hillside, mountain Hemlock on top of hill in background. 1/10 Sec. F24. Bright sun. Superpan.</p> <p><b>U104.</b> B/w photo at MN. V. 1.9.23.</p> <p><b>U105.</b> A close view of one of the groups in above. It is located in the lower left, compact, and unusually deep in color. 1/25 Sec. F16. Bright sun. Superpan. 6 x 9. <i>Phlox douglasii</i> is said by Rydberg to have white flowers but none of these were pure white; mauve of pinkish tone in varying shades. The corolla of this plant is brighter and pinker than the one pressed yesterday and noted in the Botanical Book. This is distinctively pinkish. "Cherry Red" would have to be very much lightened and brightened probably with "Jackomo Red". Flowers quite fragrant.</p> <p><b>U105.</b> B/w photo at MN. V. 1.9.24.</p> <p><b>U106.</b> <i>Spraguea multiceps</i> Howell. 1/25 Sec. F15. Bright sun. 6 x 9 Superpan. On the same sandy open ground: the rock behind is a dark, almost blue black. The leaves are rather a dark and bluish green, stems rather rosy purple. The soft fluffy flower heads vary from greenish to creamy white to quite strong purple in the older flowers with intermediate tints. "Wine Red" comes pretty close to the darker ones. Each flower has 3 stamens, the anthers quite a bright red before they open, slender filament white.</p> <p><b>U106.</b> B/w photo at MN. V. 2.2.21.</p>		

<b>Wednesday, 13 July 1938</b>	<b>At Crater Lake National Park.</b>
MM	<p>Got gas at Park Station. 2982 mls. 10 gal. Another bright warm morning, are driving to the southern part of Park to look for flowers. Mosquitoes will be plentiful we are told. Ugh! Got away from hemlock as we go lower, Yellow Pines, Fir &amp; Lodgepole a lovely forest, a deep gorge to the left as we go down. Gilia in bloom. Ceanothus out of bloom. Stopped by the site of an abandoned camp &amp; collected &amp; pressed 10 varieties of plants. Photographed <i>Spraguea</i> – stems are purple. Copper colored <i>erigonum</i> along road. Roadside lined with the little hair like stemmed plant Will gathered &amp; pressed, appearance quite reddish in the sun (fine stems). Stopped for lunch at Annie Creek Forest camp – we have been outside the Park since the collecting place but are near the S. entrance again. Stopped just outside for 4 plants, have them in the press. In the Park again. Collected a plant just inside the entrance – a bright red Indian Paint Brush. The forest through here is dust dry. The trees with cones away at the top – likely Red fir. Little low lupine quite plentiful in one spot (6000 ft.). Collected a pink lupine 6300 ft. On the Medford road we went over Cascade divide. 6225 ft. Coming back stopped for a photograph of _____ [original left blank]. Will collected some plants from a wet meadow and was nearly eaten alive with mosquitoes. Pressed them in the cabin. There was a little rain clouds in the sky tonight but the day was hot &amp; fine. The sunset was one of the most gorgeous I have ever seen &amp; the reflections in the lake beautiful. There was also a rainbow &amp; bright light on one of the high hills. Went to the program at the Lodge. Mt. Doerr spoke on the discovery, development of the Lake and Park. There was one of the Directors of the Natl. Park Service there. He spoke too. Got a letter from Louise.</p>
WCM	<p><b>U107.</b> View of Crater lake with Elderberry bush in foreground. 1/25 Sec. F11. Isos 2. Sunshine. <b>U107.</b> B/w photo at MN. V. 2.7.3.</p> <p><b>U108.</b> <i>Spraguea</i>. On a sandy flat at the southern end of the Park. 1/10 Sec. F27. Bright sunshine. Superpan. <b>U108.</b> B/w photo at MN. V. 2.2.20.</p> <p><b>U109.</b> Two tall Fir trees slender spires and branched to the ground, each trunk about 2 ft. in diameter, a short distance below the Administration building. Superpan. <b>U109.</b> B/w photo at MN. V. 2.25.</p> <p><b>U110.</b> <i>Ribes erythrocarpum</i>. On the slopes among scattered Mt. Hemlock near the cabin. 6 x 9 cm.</p>
<b>Thursday, 14 July 1938</b>	<b>At Crater Lake National Park.</b>
MM	<p>Bids fair to be another hot day. Wrote cards to all the children, Mrs. Jeffery, letter to Fred &amp; Gladys. Will is showing his photographs to one of the Rangers' Naturalists this morning, the latter being interested in photography, his work being along the line of nature photography at the U. of California helping to pay his way through. The felts were all changed &amp; I did a little washing. We took our lunch and went along the West Rim, hadn't gone far when on a steep rocky slope we saw a beautiful rose colored mass. Parked the car along &amp; walked back coming on them from above found beautiful clumps of a low rich rose red <i>Penstemon</i>. On the beautiful <i>Penstemon</i> we saw the lovely humming bird – iridescent greenish at it flashed in the sunlight. Will photographed a group in a rather precarious place. It came out all right. Found some</p>

	<p>other alpine flowers, a little further on. Photographed another group of the same Penstemon in a beautiful rock setting. There has been thunder and a little rain &amp; the air is much cooler. Pressed the plants. Had dinner &amp; went to the program at the Lodge. Got a letter from Edith. It is so good to hear from the girls.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>0.85</td> <td>Crater Lake NP</td> </tr> </table>	Food	0.85	Crater Lake NP
Food	0.85	Crater Lake NP		
WCM	<p><b>U111.</b> A view of Crater Lake showing the Hemlocks within the Rim, a fine branch thrown across the top. Good clouds. 1/25 Sec. F14. Isos 2. Sunshine. Superpan.  <b>U111.</b> B/w photo at MN. V. 2.5.</p> <p><b>U112.</b> Another view of Crater Lake showing the island. 1/25 Sec. F12.5. Isos 2. Superpan.  <b>U112.</b> B/w photo at MN. V. 2.8.23.</p> <p><b>U113.</b> Still another view of the same Elderberry bush in the foreground, but this time looking towards the right. Some fine Hemlocks below. 1/25 Sec. F11. Isos 2. Bright Cloudy. Superpan.</p> <p><b>U114.</b> <i>Penstemon Rupicola Howell</i>. Two mats of this glorious rose-crimson beardtongue on a steep rocky bank forming part of the Rim but outside. 1/50 Sec. F19. Bright sunshine. Superpan press.</p> <p><b>U115.</b> A closer view of one of these groups. 1/25 sec. F 14. Bright sunshine. Superpan.</p> <p><b>U116.</b> Another picture of the same on 6 x 9. 1/10 Sec. F9. Superpan. Bright cloudy.  <b>U116.</b> B/w photo at MN. V. 2.6.36.</p> <p><b>U117.</b> Another much the same. 1/10 Sec. F. 10 Bright cloudy. Superpan. 6 x9.</p> <p><b>U118.</b> <i>Ribes erythrocarpum</i>. A nicely flowered group among Mountain Hemlock on the rim of the Crater. 1/5 Sec. F16. Isos 2. Cloudy. Superpan press.  <b>U118.</b> B/w photo at MN. V. 2.3.24.</p> <p><b>U119.</b> A view of the Lake looking along the base of the cliff where a long line of snowdrifts edged the shore. At the right is a rock cliff touched here and there with beardtongue just photographed. 1/25 Sec. F11. Isos 2. Sunshine. Superpan. White bark pine show near the foreground.</p> <p><b>U120.</b> <i>Penstemon Rupicola Howell</i>. Farther along about 1 ½ miles from the cabin we came upon a large mat beautifully placed against a rock facing the Lake. These large mats a foot or two in length usually spring from a single tap root anchored in the cleft of the rock. 1/25 Sec. F11. Cloudy. Superpan press.</p> <p><b>U121.</b> Another picture of same on 6 x 9. 1/10 Sec. F10. Superpan. Cloudy. The leaves are decidedly grey green of a bluish tone, the upper stem and calyx tinted with rather dark purple brown on the upper side. The corolla is a brilliant rose crimson although there is considerable variation in different plants. We have no sample that matches it, "Old Rose" comes nearest but it is a richer purple than that, a very little "Wine Red" plus "Royal Crimson" added to the "Old Rose" might give it.</p>			

	<p><b>U122.</b> <i>Lutkea pectinate</i> (Push) Kuntze. A pretty group nestling beside and beneath a little mountain Hemlock, on the inside of the Crater River. 1/5 Sec. F13. Superpan. Cloudy. 6 x 9. Foliage rather a bright green, the stems are usually tinted rather red-purple, petals white, anthers pale yellow at first afterwards light brown. Sepals on the unopened buds at top of stem are tinted purplish like the stems. The general effect of the flowers is creamy or greenish white.</p> <p><b>U122.</b> B/w photo at MN. V. 2.3.31.</p>
<p><b>Friday, 15 July 1938</b></p>	<p><b>At Crater Lake National Park.</b></p>
<p>MM</p>	<p>Another bright hot morning. The mosquitoes were bad in the cabin this morning waking us soon after five. For some stupid reason there are no screens on these cabins. The driers are changed and the presses done up. There is a big pile now of finished plants. 3031' as we set out around the rim. Photographed the Lake – a magnificent sight this morning with fleecy clouds reflected in the intense deep blue. Around the north end Penstemon, tiny Mimulus, senecio. A little farther around 7100 ft alt. tiny daisy and a white flower. Stopped at the Cloud Cap viewpoint 8200 ft. Can see the little “phantom ship” as the second island is called. Quite small invisible from the west rim. Photographed the Lake from Cloud Cap. Photographed the Lake from a point near the Phantom Ship 7750 ft. Lunched here under a Mt. hemlock tree in a nice shady spot. Collected the small white flower polemonium, better specimen of the new blue beardtongue. 20 ½ mls. from start. At the 7100 ft. lookout point. The pumice gravelly slope inside the guard rail beside the lake was gay with beardtongue, senecio, myrtle, daisy, lupine with white flower small Mimulus, white phacelia ?, a tiny chaenactis. Photographed a group of the daisy and the white plant. Photographed further down on the north side of Lake – a purple beardtongue &amp; a lovely rose-red one again. This time growing on the shear face of a red cliff. This plant is lighter pink than the ones we got yesterday. Some with rose pink &amp; “Royal Crimson” should be added to the “Old Rose”. Growing in partial shade. When we got back we found it had rained here. Air was much cooler &amp; it rained again a little. Pressed the plants. Had our dinner &amp; then wrote up three days photographic records. Didn't go to the program tonight. As we drove around the rim today we went beside many snow walls though they were not so large as on Sunday. Around the north end the road in some places was about half covered with walls of snow. In one place a machine was working cutting the banks away &amp; blowing the snow over down the bank on the other side of the road, called the “Snow-Go”. Later at Rainer saw movies of one working. Queer combinations here: snow banks, melting snow, thunder storms &amp; mosquitoes! The latter have been rather bad the last couple of days. The biggest nuisance is that they get into the cabin &amp; bother us at night.</p>

WCM	<p><b>U123.</b> A general view of the Lake and Island, the sweep of the shoreline with its line of snowdrifts at the right. Taken from the lookout point just below the Watchman Tower. A few fine cloud masses in the sky are reflected in the lake. The whole scene, sky, crater wall and water forms a wonderful symphony in blue. 1/25 Sec. F16 + Proxar + Isos 2. Bright Sun somewhat in front of lens. Superpan.</p> <p><b>U124.</b> View of the Lake from Cloud Cap. 1/25 Sec. F16. Isos 2. Superpan. Bright sun. 8200' alt.</p> <p><b>U125.</b> View of the Lake with the Phantom Ship showing in a distant bay. Not very well lighted, there seemed to be a little haze in the air. Sun was shining but a thunderstorm was brewing. 1/5 Sec. F22. Distar + Isos 2. Superpan.</p> <p><b>U126.</b> The same scene without the long focal lens and therefore, of course, embracing a wider angle. 1/25 Sec. F14. Isos 2. Superpan.</p> <p><b>U127.</b> <i>Gilia congesta</i> [added later in pencil] A low white flowered plant growing on the pumice material within the Crater rim on the north side. The foliage is grey green on account of the woolly hairs although not white by any means. The stems would be rather bright red purple were it not for the softening effect of white hairs. The crowded flowers are white and have an almost dry papery appearance. I substituted darker bits of rock which were within reach of my hand for some of the lighter buff coloured material. 1/10 sec F16 Super pan press. Cloudy with thunder.</p> <p><b>U127.</b> B/w photo at MN. V. 2.6.9.</p> <p><b>U128.</b> The same plant on 6 x 9 superpan. 1/5 Sec. F11. Cloudy (slight wind motion). From flower to flower the plant was 3 ¾" across.</p> <p><b>U129.</b> A low growing tufted daisy with green linear leaves at base not grey green to any extent although slightly hairy. Flower stems somewhat purple brown, the involucre lighter green especially at the top. The disc is fairly dark almost orange-yellow and rather dark purple rays about the shade of amethyst growing with U127 on the same pumice slope. 1/5 Sec. F14. 6 x 9.</p> <p><b>U130.</b> <i>Penstemon</i>. A large mat-like growth of rich bright green foliage, no suggestion of grey, stems light green. Even the calyx is green with a bright purple on the exposed side. The corolla is purple, not blue very much like the mauve sample with some "Amethyst". The white woolly hairs on two ridges of the lower lip shows quite noticeably. This patch was over two foot across. ½ sec F16 Cloudy beneath some trees. Super pan press.</p> <p><b>U130.</b> B/w photo at MN. V. 1.10.47.</p> <p><b>U131.</b> <i>Penstemon rupicola</i> Howell. On a vertical cliff, red brown in tone, grew a lovely mat of this splendid beardtongue. Probably on account of the shape the stems were longer and more graceful the foliage a little less grey than in full sunlight and the flowers a lighter and pinker, a most lovely tone. To the "Old Rose" which approximates the usual color should be added a little "Wild Rose Pink" and some "Royal Crimson". We carried away a sample of the reddish rock. ½ sec F11 dull light with thunder and rather heavy shade. Super pan press.</p>
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U131. B/w photo at MN. V. 1.10.30.



U131    *Pentstemon rupicola* Howell

On the face of a cliff, rim of Crater Lake.  
Flowers rosy red.

**U131.** Lantern slide at PAA. PAA2007.0257/88.



**Saturday, 16  
July 1938**

**At Crater Lake National Park.**

MM

Took the boat trip around the lake. \$2 each but well worth it. It is a most magnificent trip and gives one the best idea of the Crater walls, its formations, kinds of strata and rock, and vegetations. We stopped near Wizard Island when the Naturalist gave quite a spiel about the geology of the area, the supposed origin of Crater L. a high, Mt. Mazama, which 20,000 years ago erupted for the last time and caved in leaving the vast hole which filled with water making Crater Lake. There is Devil's Backbone, a jutting out promontory which they call a dyke, something which cooled more slowly than the rest of the molten rock so became harder & stands after softer rock had eroded. Around the north end of the lake the high rocky wall is more rugged and more spectacular. One pillar standing overlooking the lake is called "Captain Applegate". There are the purple mimulus, the rose beardtongue, eriogonum to be seen on the rocks. On the N.E. part of the lake is the other island, a small one called the Phantom Ship. We circled around it

	<p>and got a fine view everyway. Will photographed it from different angles. It is a small eruption looking more like a castle than a ship from a distance, but someone said it was supposed to look like a sailing ship with set sails. There are a few trees, pretty straggly, growing on it &amp; a few rock plants. There were some caves, or grottos, here and there along the shore. When we stopped at Wizard Island we could see the bottom of the lake about 50 feet down. There were big holes in the sand, made by the charcoal or whatever was in these places disappearing with the ages &amp; the holes being left. The blue of the lake is a never ending source of delight &amp; this morning although the air was somewhat smoky, the depth of the blue was just as intense. The reflections of the clouds and the crater wall were wonderfully fine. The color in the rocks being intensified. We took a little lunch with us and ate in the shade of the high cliff, sitting on some rocks. Will photographed a plant of mimulus, lovely large pink flowers. The walk down to the lake is 1 ½ mls. with 15 or 20 switchbacks, took us 45 min. going slowly. We were about an hour coming back. The height of the Crater wall is almost 1000 feet. The last 100 ft. of the trail was across a huge snow drift. These drifts come down to the water's edge all around the south &amp; west sides of the Lake. The last three afternoons there have been continued rumblings of thunder without much rain. Just now at 5:30 it has started to hail, real icy hail stones. Tonight, we went to the Lodge program and on the way back walked as usual along the Rim. The sunset afterglow in the clouds was a lovely salmon pink &amp; the same color covered the face of the water except the part seen between the islands &amp; the shore where it was still blue. In some places the pink mixed with the blue &amp; made purple. Crater Lake 6 mls. in diameter, 21 sq. mls. in area, 26 mls. of a shoreline. 2000-4 ft. deep, discovered June 12, 1853 by John Wesley Hillman. He called it Deep Blue Lake.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Boat Trip</td> <td>2.00 each</td> <td>Crater Lake NP</td> </tr> </table>	Boat Trip	2.00 each	Crater Lake NP
Boat Trip	2.00 each	Crater Lake NP		
WCM	<p>The following six photographs were taken with the Graflex, five of them on the boat trip.</p> <p><b>U132.</b> The Devil's Backbone, a dark rock dyke in the Crater Wall, the lowest vertebrae, a towering rock is said to be 600 or 700 ft. high. 1/300 sec. F4.5. K1. Sunshine</p> <p><b>U133 and U134.</b> The Phantom Ship as we approached it and therefore the Crater Wall form a background behind it.</p> <p><b>U135 and U136.</b> The Phantom Ship from the other side, a kind of silhouette effect. These 4 were, I think, 1/235 sec. F 4.5. The light had become less strong.</p> <p><b>U137.</b> <i>Mimulus Lewisii</i> growing between rocks at the very shore of the lake. 1/80 Sec. F9. Bright sunshine. These are all Eastman's SSpan, Graflex. Leaves were a rather light green, the flowers a little brighter than "Old Rose".</p>			
<b>Sunday, 17 July 1938</b>	<b>At Crater Lake National Park.</b>			
MM	<p>A bright sunshiny hot day. We walked up the trail to the top of Garfield Peak. Got a fine dose of sunburn on top of yesterday's. Took 8 photographs on the small camera, collected several new plants. Pressed them when we came back. Went to the program in the evening. The girls next door had some plants collected in Colorado, N. Mex., Arizona, Calif. Etc. Will named a lot of them. The mosquitos bad tonight. The lake was not colored like last night though there was a little pink in the sky. Ate our lunch today under a white Bark pine tree on top of Garfield Peak.</p>			

Listed Expenses	
Postage	1.60
WCM	<p>The following 8 were taken on a trip to Garfield Peak, all 6 x 9.</p> <p><b>U138.</b> <i>Ceanothus</i>. Probably prostratus with holly like leaves trailing over the rocks. ½ sec. F 16. Shaded. Leaves a rich shining green, flower clusters purple blue somewhat greyed.</p> <p>Entry <b>4992</b> from the Field Note Book (applicable to plant photograph <b>U138</b>). <i>Ceanothus prostratus</i> Benth. Trailing over the rocky banks of Garfield Peak. Most of the plant showed healthy foliage but little or no bloom. Not abundant but noticed it at several elevations. Photographed.</p> <p><b>U138.</b> B/w photo at MN. V. 1.7.25.</p> <p><b>U138</b> Specimen may be found at the UA Herbarium Museum</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <h3 style="text-align: center;">Specimen Details</h3> <p><b>Record Type:</b> specimen</p> <hr/> <p><b>Family:</b> Rhamnaceae</p> <hr/> <p><b>Scientific Name:</b> <i>Ceanothus prostratus</i> Benth.</p> <hr/> <p><b>Collector:</b> McCalla, William C.</p> <hr/> <p><b>Collector Number:</b> 04992</p> <hr/> <p><b>Date Collected:</b> 1938-07-17</p> <hr/> <p><b>Locality:</b> North America: United States, Oregon, Klamath County, Garfield Peak</p> <hr/> <p><b>Site Name:</b> Garfield Peak: Site 1</p> <hr/> <p><b>Site Description:</b> Rocky ground on the slopes of Garfield Peak, Crater Lake.</p> <hr/> <p><b>Accession Number:</b> 61703</p> </div> <p><b>U138.</b> Image of pressed flower at UA Herbarium Museum</p> <div style="text-align: center;"> </div>

	<p><b>U139.</b> View from the trail showing a corner of the Lake and also the Lodge seen through branches of Mountain Hemlock. 1/25 sec. F18.</p> <p><b>U140.</b> Unknown. Likely the first picture of the Phantom Ship. Horizontal. <u>Yes</u>.</p> <p><b>U141.</b> <i>Polemonium shastensis Eastwood</i>. On the fall of rocks near the top. Plants shaded. ½ sec. F16. The leaves of this rock species are somewhat greyed and the flowers rather paler blue than usual.</p> <p><b>U141.</b> B/w photo at MN. V. 2.6.7.</p> <p><b>U142.</b> The bay with the Phantom Ship as seen from near the top of Garfield Peak. 150 sec. F9. Isos 2.</p> <p><b>U143.</b> The bay and Phantom Ship from the top of the Peak. 1/50 sec. F9. Isos 2. In both of these the camera was held in the hand. There were beautiful variations in the color of the surface of lake due to the Crater wall, the cloud reflections and the varying depth of water, the color close in being somewhat milky green blue.</p> <p><b>U144.</b> The trail is cut through a snow bank. Margaret standing to show the height. 6 x 9. 1/50 sec. F11. Isos 2.</p> <p><b>U145.</b> A rugged tower of rock which forms what might be called the first peak of Garfield. The general color of the rocks are a warm reddish or sometimes yellowish brown. 1/50 sec. F9. Isos. 6 x 9.</p>
<p><b>Monday, 18 July 1938</b></p>	<p><b>Travel day. Crater Lake National Park to Rogue River, Oregon</b></p>
<p>MM</p>	<p>Changed all the driers, did a bit of washing. Will saw Dr. Applegate and got some names for the plants, then we packed up got out lunch and left the cabin at one o'clock. Got letters at the Lodge from Dency, Bill, Mary and Jennie, and a very fine send-off from the Park where we had spent such a happy week. On the Medford Road inside the park saw a lovely clump of <i>Corallorhiza mertensiana</i>. Going down hill at terrific pace the altitude quickly steadily lower. A beautiful drive through the forest, shrubbery makes it green right to the road – ceanthus, Lodgepole, Fir, beautiful young growth of trees. In Rogue River National Forest. On west side of the Cascades. Bracken. Collected <i>Eriogonum</i>.</p> <p><b>Union Creek.</b> Café, cabins, filling stations. Cedar. Continues to be a beautiful forest drive. The trees and new growth, &amp; undergrowth, comes right to the road. Soil dry. Sugar pine – long cones. Madrone trees. Leaving Rogue N. Forest. <b>Prospect.</b> Apparently a resort. Crossed the Rogue river. Mill Creek Falls – a small waterfall across a ravine. Too late for botanizing. Ravine ? California-Oregon Power Co. plant. Oak, Cedar along road – Mt. spray in bloom. Great deal of madrone. Cascade Gorge winds down through it. Perennial sweet peas – not wild. <b>McLeod.</b> Camp &amp; filling sta. Oregon grape in ripe fruit. Driving along the Rogue river, a fast mtn. stream. Corn in tassel. <b>Trail</b> – little place. A number of camps along the Rogue – Famous fishing stream. <b>Eagle Point Irrigation district</b> – farming land now in evidence. Wide valley – looks like dry wild grass in large fields. Pear orchard. Big stack of hay. <b>Medford</b> 3158 – gas &amp; oil 10 gals. Food \$4.09. City of 11,000. Round Oaks. On Highway 99 now, farming valley, fruit etc. <b>Gold Hill.</b> Small town fine broad streets. Crossed Rogue r. again. Broad leaved maple. Stopped at cabins on the Rogue river at <b>Rogue River</b> town. Riverside Cabin Camp. A very nice modern cabin with a low partition between kitchen &amp; bedroom. \$1.00 for the night! As Will says “The bargain of the trip”. We’ll get a good warm shower tonight. It has been very hot</p>

	<p>today. They say here the temp. was 104 &amp; that it has been cooler than for several days. Glad we were up to 6000 ft. or so.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Juniper wood gifts</td> <td>?</td> <td></td> </tr> <tr> <td>Food</td> <td>4.08</td> <td>Medford, Oregon</td> </tr> <tr> <td>Ice cream</td> <td>0.10</td> <td>Rouge River, Oregon</td> </tr> <tr> <td>Postage</td> <td>0.15</td> <td></td> </tr> <tr> <td>Riverside Cabin Camp</td> <td>1.00 "The bargain of the trip."</td> <td>Rouge River, Oregon</td> </tr> </table>	Juniper wood gifts	?		Food	4.08	Medford, Oregon	Ice cream	0.10	Rouge River, Oregon	Postage	0.15		Riverside Cabin Camp	1.00 "The bargain of the trip."	Rouge River, Oregon
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Riverside Cabin Camp	1.00 "The bargain of the trip."	Rouge River, Oregon														
WCM	<p><b>U146.</b> <i>Polygonum Newberryi Small.</i> (<b>4923</b>) Photographed just below the cabin. A dark rock for background. 6 x 9. 1 sec. F11. Heavy shade. Super pan. The flowers are greenish yellow, leaves somewhat blue-green with rather yellow-green veins. Stems somewhat purplish.</p> <p>Entry <b>4923</b> from the Field Note Book (applicable to plant photograph <b>U146</b>). <i>Polygonum Newberryi Small.</i> Very abundant everywhere. The stems rise from large woody root stalks.</p> <p><b>U146.</b> B/w photo at MN. V. 2.2.9.</p> <p><b>U147.</b> <i>Eriogonum Marifolium.</i> The low matted species that grow on the open bank or in half shade on the slope below the cabin. This is the same species that we gathered in bud just north of the Park. At that time the inflorescence is often a bronze red. Here the flowers are now a bright yellow. The upper surface of the leaves a rather rich shining green. No. <b>4998.</b> ½ sec F11. More in the open than the previous number. Superpan 6 x 9.</p>															
<b>Tuesday, 19 July 1938</b>	<b>Travel day. Rouge River to Winchester Bay, Oregon</b>															
MM	<p>Comfortable night - cooled down. Leaving <b>Rogue River</b> (mostly cabins and service station) at 8:30. Stopped just outside of Rogue River for a composite. A bright pleasant morning – fine air. Madrone trees a feature. Savage R. Rapids Dam. Didn't look very large. Cabins galore along this road also camping spaces. Some nice suburban homes with lovely gladioli in bloom as we approach. Real Estate ads. <b>Grants Pass.</b> A fine city about 5000. Very fine looking auto courts – lots of them. The Madrone trees whose leaves stay on all winter are dropping them now. The poorest time of the year to see these trees. Hills all around – slopes dry &amp; brown among the trees. Driving over Mt. Sexton through a beautiful forest, twisting road. Summit elevation 2046. Cedar, pine, Fir, Maple, Oak, Madrone, very red soil. Grades not heavy but sharp turns. <b>Grave Creek.</b> A little place – covered bridge. Still in the mountains – a beautiful drive. Mtn. spray. <b>Wolf Creek.</b> Has a tavern, a relic of stage coach days. 1 hr and 10 mins to drive 34 to Wolf Creek gives some idea of the curving, twisting road through these mountains. Great fields of St. John's wort out of bloom. Summit Stage Pass. 1916 El. Farms in valley. Oats in stook. Perennial sweet pea in masses one spot. <b>Azalea.</b> Hotel &amp; filling station. Mtn. road again winding through woods. Summit Canyon Creek Pass. 2020 ft. Cal. hellebore. Cross Canyon Creek – a deep rocky gorge. Oregon alder. <b>Canyonville.</b> Small mountain town. Have come down to less than 1000 ft. – a very winding road again. Good road. S. Umpqua river. A straight road for a change – not a mile of straight road from Grant's Pass till now. Walnut trees &amp; other fruits. <b>Myrtle Creek</b> – mostly garages. Myrtle trees. S. Umpqua R. again + 1. <b>Dillard</b> – hamlet. Turned west now on No. 42. Broad looking Glass creek + 1. Air warmer driving west. Lots of rose bushes long out of bloom. Summit of Camas Mtn. Pass. 1468 ft. Not such a twisting road over these</p>															

	<p>mts. <b>Camas Valley</b>. Small hamlet boasting a Beauty Shop. Some straight road now going into the forest &amp; mt. road again. Dried felts &amp; changed a press about noon – took 35 min. Rugged rocks in some places. Bear creek on left as we go down the mt. Laurel trees with rounded tops. Trailing black berry bushes with underside of flowers turned up in the wind and sun, looked exactly like blooms. Loaded with berries. All along the road. Be fine berry picking a little later. <b>Remote</b> – a small town. Fresh yellow traffic line for miles along these curves. Signs of “wet paint” &amp; “keep off line”. At last after looking for half an hour first place to pull off in shade to eat our lunch under a broad leaved Maple. <b>Bridge</b>. P.O. store, cabins, garage etc. All the same type of covered bridge on this road. <b>Myrtle Point</b> – has a Lion’s Club, something of a town. Stopped here to go to the bank &amp; cash a cheque. Plenty of myrtle trees lovely of form. <b>Coquille</b> – logs galore at the lumber mill waiting to be cut up – a nice town. On 101 Highway now – the Coast Highway. Passed the Myrtle Wood factory where we bought our pieces three yr. ago. Red fruited Elderberry. A lovely woodsy drive, curving road not such sharp as further back. Broom bushes. Salal. Can feel the cooler air from the sea. Lumber mills at <b>Mansfield</b>. Got gas 3342 mls. 10 gal. A great change in air. Quite cool need my sweater. Got food at <b>N. Bend</b>. 18¢ + 69¢. Driving over the new bridge across Coos bay where we ferried 3 yrs. ago. A beautiful very long fine bridge, central span part painted a delicate green. A drive through beautiful woods, curving road again. Some gorgeous broom bushes just covered with bright yellow flowers. Yellow pad lilies. Sand dunes between road &amp; ocean. Eel Creek Forest camp. Will has gone to make some enquiries – no good here 3 mls. from ocean. Driving through some desolate logged &amp; burned over parts. Saw a rhododendron with a few fresh flowers. Driving through a Spruce forest, probably Sitka S. Stopped at <b>Winchester Bay</b>, an arm of the Pacific at “The Winchester Bay Cabins” - \$1.25, 2 rooms, toilet and hot water, gas to cook, a wood heater - very comfortable. After dinner we walked down to the beach when the tide was away out. We saw it first just after we got settled here &amp; there was a big difference: was windier earlier too. Will collected fine specimens: yellow sand verbena, a tansy like plant, a couple of unknown ones, a Lupine &amp; put them all in the press. The air here is very cool and strong. After the intense heat of yesterday &amp; even the more moderate heat of this morning, it is a great change. We had to bundle up when we went down to the beach. All today we drove over curving winding mountain roads. Tonight we both are “going” a little as a result. Will thinks we have never driven over so many miles of such short sharp curves as the 190 we did today. The forests were very beautiful and the drive most interesting if somewhat tiring for the driver. The roads were good though the crossroad 42 was rather narrow. It was interesting to watch the fog rolling in through the trees.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Stamps and cards</td> <td>0.21</td> <td></td> </tr> <tr> <td>Food</td> <td>0.87</td> <td>North Bend, Oregon</td> </tr> <tr> <td>Winchester Bay Cabins</td> <td>1.25</td> <td>Winchester Bay, Oregon</td> </tr> </table>	Stamps and cards	0.21		Food	0.87	North Bend, Oregon	Winchester Bay Cabins	1.25	Winchester Bay, Oregon
Stamps and cards	0.21									
Food	0.87	North Bend, Oregon								
Winchester Bay Cabins	1.25	Winchester Bay, Oregon								
WCM	Nothing recorded.									
<b>Wednesday, 20 July 1938</b>	<b>At Winchester Bay, Oregon.</b>									
MM	Had a leisurely, quiet day. The air has been lovely and cool. Went down to the shore of the bay this morning when the tide was out. A different looking place, sand and lots of seaweed along the bare sand left by the receded water. This afternoon we were down again where the tide was in and all this was covered again. Will collected and pressed a few more plants, has pressed 15 or so from this spot. Drove to <b>Reedsport</b> , a down at the heels looking town, but we got last week’s and this week’s post there and tonight									

	<p>read the 2 instalments of "Uncle ?house story". I got some food at Reedsport and Will got a haircut. Made some applesauce and cooked a few apricots. Tonight had a new kind of dinner – crab meat, fresh peas, applesauce, cake, etc. I got the crab cooked at a little stand called "the Crab Nook" across from the cabins. It was delicious – the first time we have ever eaten it. Had a little fire in the stove. The air is foggy and chilly. Such a contrast to what we have been having.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>0.57</td> <td>Reedsport, Oregon</td> </tr> <tr> <td>Food</td> <td>0.41</td> <td>Winchester Bay, Oregon</td> </tr> <tr> <td>Postage</td> <td>0.25</td> <td></td> </tr> <tr> <td>Winchester Bay Cabins</td> <td>1.25</td> <td>Winchester Bay, Oregon</td> </tr> </table>	Food	0.57	Reedsport, Oregon	Food	0.41	Winchester Bay, Oregon	Postage	0.25		Winchester Bay Cabins	1.25	Winchester Bay, Oregon
Food	0.57	Reedsport, Oregon											
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Postage	0.25												
Winchester Bay Cabins	1.25	Winchester Bay, Oregon											
WCM	<p><b>U148.</b> <i>Glehnia littoralis</i> Schmidt. This interesting umbelliferous plant, which I see for the first time, in fruit on small sand dunes at Winchester Bay. The sand had buried everything except two leaves and the great cluster of winged fruits. The latter, indeed, was partly covered before I blew away some of the sand. 1/25 sec. F11. Plant shaded but light strong. Superpan.</p> <p><b>U149.</b> <i>Glehnia littoralis</i> Schmidt. The same plant brought into the cabin and placed against a grey background. 1 sec F11. 30% nat. size. Super pan. The leaves are a rich shining green somewhat olive in tone. This the upper surface, beneath they are quite grey due to the heavy coating of fine hairs. The leaf stems are a lighter yellow green with some purple tinting near the base. They, too, are quite hairy. The petioles are quite expanded below. The fruits, here practically ripe, are very pale greenish white, more or less tinted with purplish brown. Each "fruit" is about 16 mm. long and 13 or 14 mm. across. It has prominent wings and as you look down upon it these flanges or wings suggest an air-cooled engine. Two of these wings are darker and at maturity each "fruit" divides into 2 portions each now with 5 wings and a quite large seed in the centre.</p> <p><b>U149.</b> B/w photo at MN. V.2.5.17.</p>												
<b>Thursday, 21 July 1938</b>	<b>Travel day. Winchester Bay to Otter Rock, Oregon.</b>												
MM	<p>Leaving <b>Winchester Bay</b> at 10. o'clock. Foggy this morning 3380 mls. Fine bridge at <b>Reedsport</b>. Draw bridge painted green too, the steel part – approaches concrete. <b>Gardiner</b> – an older looking town – a mtn. road goes through woods again. Passed the camp where we spent the night by the sand dunes. Salal, blackberries, ferns, etc. mostly Spruces on slopes covered with broom in fruit. Rhododendrons, evergreen huckleberry, manzanita, spiraea, yellow crepis bordering the road. White &amp; yellow water lilies. Stopped by a pretty lake, Woahink Lake. <b>Jessie M. Honeyman Memorial State Park</b>. Cut banks planted with shrubs of various kinds. <b>Florence</b> – an exceedingly handsome bridge with pillars. Siuslaw Nat. Forest. Lake after lake to the right as we go up the coast – Sutton L. Blackberries among the bracken. Mtn. spray – at the broad Pacific now &amp; can't see for fog. Sea Lions Caves didn't stop. High cliffs on one side, ocean on other. Down this hill &amp; through a tunnel we come on a view of the shore, with waves breaking on rocks. Stopped here to dry felts &amp; change press. A beautiful little cove with 2 big rocks guarding one side. A light house just beyond. Greens &amp; browns of the huckleberry make the hills beautiful, also flat places between sea &amp; rocks.</p> <p><b>Roosevelt Beach</b> – can see the waves breaking. We hope the fog will clear. A good view for ? away. Sat by Cook's Chasm &amp; watched the breakers – a grand view. A small fishing boat drifted into the fog. <b>Cape Perpetua. Yachats</b>. A lovely beach here. Have had many fine views of the shore with the breakers but the visibility out to sea is nil. <b>Waldport</b>. A</p>												

	<p>beautiful bridge here. Ate our lunch at Seal Rock park overlooking the sea and the large rocks. The sound &amp; sight of the surf breaking over the rocks is most interesting &amp; fascinating, there are so many changes in the distance the water goes into the air &amp; then comes down on the other side of the rock. Saw the little fishing boat again. Still foggy but we can see a little further. The sun is bright. Crossing bridge at <b>Newport</b> – one of the largest &amp; finest. Stopped here to enquire for mail – none yet. Got a little food. Came onto <b>Otter Rock</b> and stopped at Beel's Cottages. They are new &amp; very attractive, comfortable and well fitted up. We intend staying over the week-end. Went down to the Punch Bowl &amp; saw the sea again. It is a beautiful coast line here, beach, rock et al. We phoned the Dewey's to tell them we were here, hoping they might come for the week-end. Betty answered so we don't know what they may do.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>0.49</td> <td>Newport, Oregon</td> </tr> <tr> <td>Beel's Cottages</td> <td>2.00</td> <td>Otter Rock, Oregon</td> </tr> </table>	Food	0.49	Newport, Oregon	Beel's Cottages	2.00	Otter Rock, Oregon
Food	0.49	Newport, Oregon					
Beel's Cottages	2.00	Otter Rock, Oregon					
WCM	Nothing recorded.						
<b>Friday, 22 July 1938</b>	<b>At Otter Rock, Oregon.</b>						
MM	<p>A lovely bright though windy morning. Had the use of a washing machine &amp; tubs &amp; got the sheets cleaned up again. Spent a good part of the day at the beach and among the rocks. Got some plants and took care of them.</p> <p><b>Listed expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>0.90</td> <td>Otter Rock, Oregon</td> </tr> <tr> <td>Beel's Cottages</td> <td>2.00</td> <td>Otter Rock, Oregon</td> </tr> </table>	Food	0.90	Otter Rock, Oregon	Beel's Cottages	2.00	Otter Rock, Oregon
Food	0.90	Otter Rock, Oregon					
Beel's Cottages	2.00	Otter Rock, Oregon					
WCM	Nothing recorded.						
<b>Saturday, 23 July 1938</b>	<b>At Otter Rock, Oregon.</b>						
MM	<p>After we were finished with breakfast, changing presses, etc., about ten o'clock we were delighted to have the Dewey family arrive from Portland. They got a cabin next to us and stayed till Sunday about 6. We had our lunch altogether in our cabin &amp; spent the afternoon at the beach. We looked for agates &amp; at all the various things in the marine gardens. The tide was not very low but it was interesting to see the little sea anemones &amp; other things. We picked up shells &amp; some pretty stones. We had our dinner back in our place &amp; spent the evening together. Beautiful sunny day.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food (23 &amp; 24 July)</td> <td>1.14</td> <td>Otter Rock, Oregon</td> </tr> <tr> <td>Beel's Cottages</td> <td>2.00</td> <td>Otter Rock, Oregon</td> </tr> </table>	Food (23 & 24 July)	1.14	Otter Rock, Oregon	Beel's Cottages	2.00	Otter Rock, Oregon
Food (23 & 24 July)	1.14	Otter Rock, Oregon					
Beel's Cottages	2.00	Otter Rock, Oregon					
WCM	Nothing recorded.						
<b>Sunday, 24 July 1938</b>	<b>At Otter Rock, Oregon.</b>						
MM	<p>Today we had a very pleasant time visiting with the Dewey's enjoying the beach &amp; the ocean. Will did some collecting in the morning with Don as assistant. We had our lunch at the park at the sea. There are tables, features, water etc. in the Devil's Punch Bowl State Park., on the cliff above the beach. Spent all afternoon down in the sand. There was no bright sunshine today &amp; it was fairly cool &amp; windy. The Dewey's and Will drove to Agate beach to get some agates polished. Three were done, one of them mine. It isn't brilliant but it is a pretty green.</p> <p><b>Listed expenses</b></p> <table border="1"> <tr> <td>Beel's Cottages</td> <td>2.00</td> <td>Otter Rock, Oregon</td> </tr> </table>	Beel's Cottages	2.00	Otter Rock, Oregon			
Beel's Cottages	2.00	Otter Rock, Oregon					
WCM	Nothing recorded.						

<b>Monday, 25 July 1938</b>	<b>At Otter Rock, Oregon.</b>											
MM	<p>Very foggy today, the visibility at the shore was nil – You wouldn't know there were rocks anywhere at all. The air up here by the road was full of moisture &amp; fog was everywhere. Mailed a letter to Edith &amp; Louise, Dennis, Enid &amp; Arthur, a piece of pumice to Dennis for his birthday, cards to Mrs. Loucks &amp; Mrs. Young. Will washed the car, collected &amp; pressed some plants. We were down by the Punch Bowl a couple of times but it was too foggy to make it worthwhile going to the shore. There are some lusty involucrata honeysuckle growing here just like huge bushes 15' high. Huge berries. Trailing black berry bushes are common, too. Salal, evergreen huckleberry, all in fruit.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>0.42</td> <td>Otter Rock, Oregon</td> </tr> <tr> <td>Beel's Cottages</td> <td>2.00</td> <td>Otter Rock, Oregon</td> </tr> <tr> <td>Postage and Cards</td> <td>0.13</td> <td></td> </tr> </table>			Food	0.42	Otter Rock, Oregon	Beel's Cottages	2.00	Otter Rock, Oregon	Postage and Cards	0.13	
Food	0.42	Otter Rock, Oregon										
Beel's Cottages	2.00	Otter Rock, Oregon										
Postage and Cards	0.13											
WCM	Nothing recorded.											
<b>Tuesday, 26 July 1938</b>	<b>At Otter Rock, Oregon.</b>											
MM	<p>Still very foggy and damp this morning. Stayed so all day.</p> <p><b>Listed expenses</b></p> <table border="1"> <tr> <td>Food (milk)</td> <td>0.13</td> <td>Otter Rock, Oregon</td> </tr> <tr> <td>Beel's Cottages</td> <td>2.00</td> <td>Otter Rock, Oregon</td> </tr> <tr> <td>Postage</td> <td>0.60</td> <td></td> </tr> </table>			Food (milk)	0.13	Otter Rock, Oregon	Beel's Cottages	2.00	Otter Rock, Oregon	Postage	0.60	
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Beel's Cottages	2.00	Otter Rock, Oregon										
Postage	0.60											
WCM	<p>Otter Rock Ore.</p> <p><b>U150.</b> <i>Parentucellia viscosa</i> (L.) Car. No. <b>5033</b> of the Botanical Record. Stems are a richer light green, the taller one with a tinge of purple especially below. Bracts (on leaves) and the Calyx richer yellowish green somewhat dull, almost grey in tone. The Calyx and bracts where younger that is among the flowers, distinctly yellowish green. The brightened part of the Corolla is the three barbed lower lip which is a rather bright light yellow. Canary Yellow. The hood-like upper lip is whitish green or pale yellowish green would be perhaps better. The stigma on a bent over style stands in the center and beneath the hood, it is an almost translucent pale yellowish green. 2 ½ Sec. F11. Superpan. 40% nat. size.</p> <p>Entry <b>5033</b> from the Field Note Book (applicable to plant photograph <b>U150</b>).</p> <p><i>Parentucellia viscosa</i> (L.) Car. Probably <i>Rhinanthus</i> but unusually large. In open cleared ground along side a path but in the grass a few feet away.</p> <p><b>U150.</b> B/w photo at MN. V. 2.6.40.</p> <p><b>U151.</b> <i>Lonicera involucrate</i>. Stem rather strongly tinted with dull reddish brown, warm chestnut brown below as the bark develops. Leaves on top are a very deep rich green, bluish rather than yellow with lighter green veins. On the under surface the leaves are a lively green of a yellowish tone. The peduncles are dark reddish brown. The sepals on the back are also brown but some show some green. The broad involucres are at first rather light green on the back, with shadings and patches of red. Later as the fruit ripens they become much deeper in color, a rich dark red. On the inside the sepals become very dark red brown and the involucres in blood red with a sheen or gloss which the back does not have to the same extent. We have no color at all as rich. The shining berries are black. 5 or 6 Sec. F16. Superpan. About 60 % n. s.</p>											

	<p><b>U152.</b> <i>Mimulus guttatus</i> D.C. A large yellow flowered species that grows on the damp cliff. Foliage a deep rich green, the flowers bright yellow with reddish brown spots on the lip. 1/5 Sec. F11. Cloudy with slight fog. Superpan.  <b>U152.</b> B/w photo at MN. V. 2.6.37.</p> <p><b>U153.</b> A closer view of part of this same group. 1/5 sec. F22. Superpan press.</p> <p><b>U154.</b> <i>Angelica Hendersonii</i> C &amp; R. The rather large umbelliferous plant that I had first taken as a Cow Parsnip modified by exposure. This plant was just below an overhanging earth cliff in a rather sheltered spot. Bracken ferns were the chief associates. 1/10 sec. F9. Superpan. Cloudy.  <b>U154.</b> B/w photo at MN. V. 1.8.15.</p> <p><b>U155.</b> A detail of this same plant. The leaves, a basal one of which is set up behind the flowering stem, are a rich dark green, thick, handsomely veined and with a slight lustre. The stems and inflated sheathing base of the upper leaves are a lighter green of a little yellow tone. The umbels with unopened flowers are tinted with a dull but not dark purplish brown and even the open flowers, that is, the petals retain a slight purplish tint at times. The general effect of the flowers is one of whiteness with a suggestion of greenish white. The stamens are essentially white, so is the stigma, but the little flowers are somewhat greenish at the base. The umbel in the picture is 4 ½" in diameter and the unopened umbels measure 13 " across from outside edge to outside edge. 4 ½ Sec. F16 Superpan.  <b>U155.</b> B/w photo at MN. V. 1.8.16.</p> <p><b>U156.</b> Much the same arrangement on 6 x 9 Superpan. 2 ½ Sec. F11.</p>						
<b>Wednesday, 27 July 1938</b>	<b>At Otter Rock, Oregon.</b>						
MM	<p>Much clearer today.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food (Biscuits and Bread)</td> <td>0.20</td> <td>Otter Rock, Oregon</td> </tr> <tr> <td>Beel's Cottages</td> <td>2.00</td> <td>Otter Rock, Oregon</td> </tr> </table>	Food (Biscuits and Bread)	0.20	Otter Rock, Oregon	Beel's Cottages	2.00	Otter Rock, Oregon
Food (Biscuits and Bread)	0.20	Otter Rock, Oregon					
Beel's Cottages	2.00	Otter Rock, Oregon					
WCM	Nothing recorded.						
<b>Thursday, 28 July 1938</b>	<b>Travel day. Otter Rock, Oregon to Castle Rock, Washington</b>						
MM	<p>3469 mls. Leaving <b>Otter Rock</b> at 9:30. Dull this morning but not very foggy. Had a lovely week but are not enthusiastic over the foggy atmosphere. <b>Depoe Bay.</b> Stopped to see the aquarium. 10 cents admission. Very worthwhile. The sea anemones were exquisite – many of them a beautiful color &amp; form. A live octopus, a horrible looking beast. Lots of different fish, small shellfish, sea weed etc. The road is fine again between sea &amp; forest. Great many fine rivers. <b>Boiler Bay. Lincoln Creek.</b> A succession of Beaches, Cabins, cottages etc. Stopped at <b>Cutler City</b> for groceries. \$6.53. <b>Otis.</b> After this leave the sea for a while, then road winds through a beautiful forest, similar shrubs &amp; Alder trees coming down the slopes to the road – a beautiful road. Maple in fruit. Ferns, bracken, blackberries, red fruited elderberry, foxglove. <b>Neskowin.</b> On sea again. Some farms through here on the hillside. Some good buildings. Dairying. Large white morning glory. <b>Cloverdale</b> – small town. Had to wait for some construction. Nestucca River. Wooded slopes are beautiful. Mountain Ash are in fine fruit. Enormous maple in farmyard. Met an Alberta car. Blue hydrangeas in gardens. Farms close together. <b>Tillamook.</b> Got gas. 3537. 10 gal. Large cheese factory. <b>Bay City.</b> Mtn. Maples. Swing</p>						

	<p>around the bay to <b>Garibaldi</b>. Lumbering. Stopped for lunch at a wayside “turnout” in sight of the sea on an inlet. Alder trees by road. <b>Twin Rocks – Rockway</b> ran into each other. A continuous row of cottages on beach. <b>Wheeler</b>. Evergreen blackberry along road today. Mtn. Maple very lovely with its ruddy brown tops &amp; bright fruit. Devil’s Club large in fruit. A very twisty road to seaside – from there to <b>Astoria</b> not such sharp in &amp; out curves. A beautiful road for the passenger, not so good for the driver. A large town or city busy with shipping activities. An old looking town. Passed many trucks before <b>Astoria</b> loaded with logs from 1 to 4 or 5 – huge things. On US30 again – the Columbia highway en route to Rainier via Longview bridge instead of crossing the river by ferry at Astoria. Columbia – a great river at &amp; near its mouth. Aruncus with brown tassels. Hundreds of mls. of bracken. John Day river – fishing boats &amp; maybe one of the last tributaries of the Columbia. Hemlock, spruce, fir, cedar, maple. Some places on road shady dell. Very lovely. Still a winding road but not so many sharp curves. Luxuriant vegetation all along. Collected bracken. Summit of Clatsop 700 ft. above river. Fine view. Descend this in a series of switchbacks. <b>Westport</b> – a freighter at dock – some passengers, too, apparently. <b>Kerry</b>. Both small towns. Farming through here. <b>Clatskanie</b> Quite a town. High banks &amp; cliff, wooded &amp; ravines sometimes with streams – road winding in &amp; out not near the river for some many miles. Summit of <b>Rainier Hill</b> 671’ el. Winding down the other side to the river again. Crossing the Longview bridge – very long &amp; high – 90 cents for car &amp; 2. Extensive lumber mills to be seen from bridge. <b>Longview</b> a city of 10,000 +. Washington State on 99. <b>Kelso</b>. Drove along to nearly <b>Castle Rock</b>. Stayed in a cabin camp called Kum-back-Camp \$2 a cabin meant for four. Rather noisy with the traffic on the highway.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>6.53</td> <td>Cutler City, Oregon</td> </tr> <tr> <td>Bridge toll</td> <td>0.90</td> <td>Longview Bridge</td> </tr> <tr> <td>Kum-back Camp</td> <td>2.00</td> <td>Castle Rock, Washington</td> </tr> </table>	Food	6.53	Cutler City, Oregon	Bridge toll	0.90	Longview Bridge	Kum-back Camp	2.00	Castle Rock, Washington
Food	6.53	Cutler City, Oregon								
Bridge toll	0.90	Longview Bridge								
Kum-back Camp	2.00	Castle Rock, Washington								
WCM	Nothing recorded.									
<b>Friday, 29 July 1938</b>	<b>Travel day. Castle Rock to Mt. Rainier National Park</b>									
MM	<p>Nice morning, partly cloudy. Leaving here at 9:40 on route to Rainier. Log trucks again. Changed driers before leaving cabin. Wood fire. Maggard’s Cabins. A mile north of Castle Rock <u>looking very nice</u>. Got gas at 3689 just at these cabins. 10 gals and qt of No. 20 oil. Very broad bridge over Toutle R. Barnes State Park and woods. Fine highway partly through woods. <b>Toledo</b>. Cashed a cheque. Turnouts along the road with garbage cans provided. Lewis and Clarke St. Park. Turned east at <b>Mary’s Corner</b> on No. 5. Vineyard trained overhead. Looks like logged over area – farms. <b>Salkum</b>. A small hamlet. Bracken by road all brown maybe sprayed with oil. Driving through pleasant country wooded hills valley farms. <b>Mossy Rock</b>. Small village. Dairying mostly. Lovely outlook as we drive along: fields, wooded hills, haze, fine clouds. <b>Riffle</b>. Not taking the street out to Morton. Lots of maple trees, cherry, catalpa. River’s looking milky. <b>Kosino?</b> Great road through forest. Abundance of bracken. Logs on trucks &amp; train cars. <b>Morton</b>. 650. A fine road through forest. Divide 1773’. After turning east from <b>Elbe</b> we have our first view of Mt. Rainier, its white peak rising above the hills. Mt. Rainier is 14,408 ft. <b>Ashford</b> – 290 pop. At the Park Gate - \$1.00 fee. Beautiful drive through woods, ferns,? Set up our camp in the <b>Longmire camp grounds</b>, 3790 mls., near our site of 3 yrs. ago. The day is sunny and pleasant. Will has contacted the naturalist who gave him a permit, also a book – a check list of the flowers of the Park. He was much impressed with the book of photographs which Will showed him. We have a lovely fire in our wood camp stove &amp; the green peas are cooking, the applesauce is cooked so we</p>									

	<p>shall soon have our supper. We shall probably go to the program at the community house at 8. Colored slides of some of the flowers of the Park and a movie of the Wonderland Trail - a trail all around the Park which takes about ten days or 2 wks. by packing a knapsack! Mr. Brockerman, the Naturalist, gave the talk.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Park Fee</td> <td>1.00</td> <td>Mt. Rainier</td> </tr> </table>	Park Fee	1.00	Mt. Rainier
Park Fee	1.00	Mt. Rainier		
WCM	Nothing recorded.			
<b>Saturday July 30, 1938</b>	<b>At Mt. Rainier National Park, Longmire.</b>			
MM	<p>Another fine bright morning. We drove to <b>Paradise Valley</b> and walked up to the <b>Nisqually Glacier</b>. The flowers are again a source of wonder and delight. The season has been very dry and things are advanced at least two weeks. Will thinks even more because some things that were out three years ago are gone and really we are two weeks earlier than last visit. Got some photographs of plants. Collected quite a number. Part of the time the mountain was clear but part time it was covered with white clouds. It is a magnificent site and I am glad to see it again.</p>			
WCM	<p>Plants photographed on the Hudsonian slopes above Paradise Valley.</p> <p><b>U157.</b> <i>Saxifraga Tolmiei</i> T&amp;C. Growing against a rock in rather dry soil. The small fleshy leaves mostly at the base of the stem are bright shiny green. Flower stems are purple brown, petals are white as are the much dilated filaments. The anthers are unusually small, a dark dot at the tip of the almost petal-like filaments. The newly opened flowers, the inside of the sepals and the pistil is light yellow green but as the flower ages the sepals and the divergent beaks above the ovary become tinted, spotted or striped with red-purple brown quite bright in some cases. Even the base of the petals become red purple. (The anthers before opening are a rich dark red.) An attractive little plant with its bright green mat foliage and star-like variously colored flowers. The largest flowers are about 15 mm. in dia. We noticed where the snow had recently disappeared, extensive and uniform mats of the foliage had formed a film-like cover over the soil. 1/25 Sec. F11. Sunshine from left. 9x12 Superpan.</p> <p><b>U157.</b> B/w photo at MN. V. 1.5.16.</p> <p><b>U158.</b> <i>Aster Alpigenus</i> (T&amp;C) Gray [Alpine aster] 1/5 sec F11. Plants shaded. Superpan.</p> <p><b>U159.</b> The same group from a slightly different position. 1/25 sec. F12.5. Full sunlight.</p> <p><b>U160.</b> Another plant of the same kind. 1/25 sec. F14. Bright sun. 6x9 Superpan. The leaves are rather dark blue green slightly greyed, stems often more or less dull brown, the rays might be called violet purple, between "Mauve" and "Wisteria Violet".</p>			

**U160.** B/w photo at MN. V.2.7.11



U160 Aster alpigenus (T.&G.) A.Gray  
Above Paradise Valley, Mount Rainier.

**U160.** Lantern slide at PAA. 2007.0257/80.



**U160** Specimen may be found at the UA Herbarium Museum

### Specimen Details

**Record Type:** specimen

**Family:** Asteraceae

**Scientific Name:** *Aster alpigenus* (Torr. & A. Gray) A. Gray

**Collector:** McCalla, William C.

**Collector Number:** 05056

**Date Collected:** 1938-07-30

**Locality:** North America: United States, Washington, Mount Rainier National Park, Paradise Valley

**Site Name:** Paradise Valley, Mount Rainier National Park: Site 3

**Site Description:** Open slopes above Paradise Valley, Mt. Rainier.

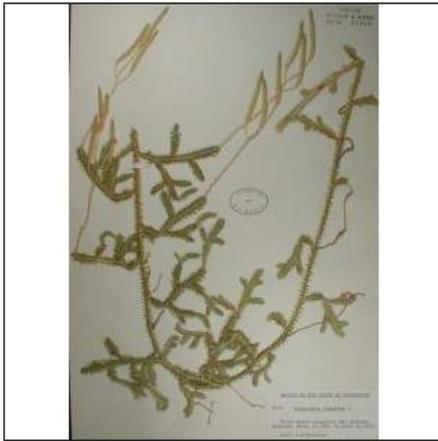
**Accession Number:** 68531

**U160.** Image of pressed flower at UA Herbarium Museum



**U161.** *Pedicularis contorta*. 1/10 Sec. F8. Shaded. 6 x 9 Superpan. Group in a poor setting but in the open wind was so violent it was impossible to get a photograph. The stem rose from a carpet about 3 inches thick of dark blue green Spiraeae leaves. The foliage of the *Pedicularis* is lighter and yellow green, sometimes somewhat browned, the bracts and calyx lobes are quite light yellow green. The petals are cream colored, the sides of the beak near the bend are more or less spotted with purple brown, the beak is strongly curved. Stems are often reddy brown, strongest beneath the flowers.

**U162.** *Potentilla flabellifolia*. 1/50 Sec. F9. Sunshine 6 x 9. Superpan. A mat-like rather low growth of this handsome species in a rather exposed situation at about 6000 ft. The

	<p>foliage is rich deep green, the stems and three lobed bracts between the sepals are not much lighter, the sepals are yellowish green. Petals are deep yellow with orange shadings at the base of each, the broad anthers, a creamy yellow. The pistils are a yellowish green. The pistils have a ring of very dark purple at their base.</p> <p><b>U163.</b> <i>Mimulus Lewisii</i>. A fine group in a little ravine by a tiny rill. Behind on the banks are masses of Lupines, Bistort, Arnica latifolia and an occasional brilliant Indian Paint Brush. 1/100 Sec. F8. Bright sun full on the plant. Very windy.</p>
<b>Sunday, 31 July 1938</b>	<b>At Mt. Rainier National Park, Longmire.</b>
MM	<p>Another bright warm day. We took a light lunch and went part way along the trail leading to Eagle Peak. We got off the beaten track on to a trail leading to the water tank &amp; upper system. Here along a stream up a mossy ravine Will found a number of interesting plants. Altogether we got 18. Mimulus, some lovely maiden hair fern, pine drop, a new Prince's Pine &amp; other plants. Photographed Club Moss and Pine Drops. We climbed about 1000 ft. or so not counting the two paths we went at least a third farther. Enjoyed our fireside in the evening. Saw a deer &amp; fawn on our walk.</p>
WCM	<p><b>U164.</b> <i>Lycopodium clavatum</i>. Trailing down a bank in the woods above Longmire, 3000'. ½ Sec F9. Mostly in shade. Superpan. <i>Berberis venosus</i> and <i>Vaccinium</i> are associated plants. Dried olive or yellowish green moss is ground cover. The club moss is a bright, handsome green. No fruiting stems here, we collected them 500 ft. higher. Entry <b>5076</b> from the Field Note Book (applicable to plant photograph <b>U164</b>).</p> <p><i>Lycopodium clavatum</i>. Trailing in graceful fashion on steep banks. We saw and photographed the vegetative stems at about 3000 ft., collected the fruiting specimens at 3500 ft.</p> <p><b>U164.</b> Specimen may be found at the UA Herbarium Museum</p> <div style="border: 1px solid black; padding: 10px;"> <p><b>Specimen Details</b></p> <p><b>Record Type:</b> specimen</p> <p><b>Family:</b> Lycopodiaceae</p> <p><b>Scientific Name:</b> <i>Lycopodium clavatum</i> L.</p> <p><b>Collector:</b> McCalla, William C.</p> <p><b>Collector Number:</b> 05076</p> <p><b>Date Collected:</b> 1938-07-31</p> <p><b>Locality:</b> North America: United States, Washington, Pierce County, Longmire</p> <p><b>Site Name:</b> Longmire area: Site 3</p> <p><b>Site Description:</b> Woods above Longmire, Mt. Rainier National Park, at 3500 feet.</p> <p><b>Accession Number:</b> 32486</p> </div>  <p><b>U165.</b> <i>Pine Drops</i> In woods along Eagle Peaks trail. 3000'. Tallest plant 37 inches high; has 86 flowers distributed over 28 inches of stem. 1/5 sec. F9. Super pan.</p> <p><b>U166.</b> Another much the same, sunshine on tops of stems. ½ sec. F12. Super pan.</p>

	<p><b>U167.</b> Another of the same but most of the stems in sunlight. ½ sec. F12. Super pan. Entry <b>5079</b> from the Field Note Book (applicable to plant photograph <b>U167</b>). <i>Pterospora andromedea</i> Nutt. Pine drops. We saw this plant in the woods at Longmire and almost 1000 ft. higher on the Eagle Peak trail. It was not abundant but one would see them here and there, sometimes a few but on one hillside at about 3400 ft. we saw probably 30 or 40 stems scattered about. This was a steep slope largely devoid of other undergrowth. Photographed. Stems extremely sticky.</p> <p><b>U167.</b> Specimen may be found at UA Herbarium Museum.</p> <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>Specimen Details</b></p> <p><b>Record Type:</b> specimen; photograph</p> <hr/> <p><b>Family:</b> Ericaceae</p> <hr/> <p><b>Scientific Name:</b> <i>Pterospora andromedea</i> Nutt.</p> <hr/> <p><b>Collector:</b> McCalla, William C.</p> <hr/> <p><b>Collector Number:</b> 05079</p> <hr/> <p><b>Date Collected:</b> 1938-07-31</p> <hr/> <p><b>Locality:</b> North America: United States, Washington, Mount Rainier National Park, Mount Rainier</p> <hr/> <p><b>Site Name:</b> Tahoma Creek, Mount Rainier: Site 10</p> <hr/> <p><b>Site Description:</b> Woods along Tahoma Creek on west side of Mt. Rainier.</p> <hr/> <p><b>Accession Number:</b> 63026</p> </div> <p><b>U168.</b> The top of one of these stems about natural size, red cedar trunk a background. 2 sec. F11. Super pan. Stems, pedicles and calyx deep red, darker on lower part of stem. Corolla pale cream – colour rather dulled. Older flowers become more browned, salal etc. on ground.</p>			
<p><b>Monday, 1 August 1938</b></p>	<p><b>At Mt. Rainier National Park, Longmire.</b></p>			
<p>MM</p>	<p>Here we are in August. Woke this morning to find it cold and dull. Wrote up the Botanical Record, pressed yesterday's plants. Dried the felts over the stove. Ate our lunch by the fire. It rained a little just after noon but the blue sky is showing here and there at 2 PM. Will played Good Samaritan to two parties who came expecting to use wood and brought no axe. Our axe has now helped three parties out. Stayed cold and dull with one good sharp shower. We got lovely mail from Helen, Edith and Louise. Everything is fine with them. Sent cards to Fred, Arthur, Hugh and Muriel, Kay, Helen and Jean. Tried to get some food at the alleged store. They had no bread, no oranges or lemons. A wretched place to shop and exorbitant in price. Went to the lecture on the forests of Rainier Park. Some very good slides and some not so good.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>1.15</td> <td>Longmire, Mt. Rainier</td> </tr> </table>	Food	1.15	Longmire, Mt. Rainier
Food	1.15	Longmire, Mt. Rainier		
<p>WCM</p>	<p>Nothing reported.</p>			
<p><b>Tuesday, 2 August 1938</b></p>	<p><b>At Mt. Rainier National Park, Longmire.</b></p>			
<p>MM</p>	<p>Still dull &amp; cool this morning. Walked along the River Path, collected a few plants, took one photograph, while photographing a fine branch of Salmon berry a little velvet strip came out of the holder, spoiling that film and putting the camera out of commission.</p>			

	Pressed the plants after lunch and dried the felts. Brighter now at 4:30. The sun is shining. Hope it will last.
WCM	<p><b>U169.</b> <i>Berberis nervosa Pursh.</i> In fruit beside a log which is grey where exposed and yellowish brown where recently broken. The bark is long since gone. 1/5 sec. F11. Super pan. 6x9. Note: In the next photograph the slide stuck and one of the velvet linings pulled out thus letting in light and putting the small camera out of commission till we get another holder. (Good after all.)</p> <p><b>U169.</b> B/w photo at MN. V. 2.2.43.</p> <p><b>U169A.</b> Salmon berry against Cedar trunk. 6 x 9 cm.</p>
<b>Wednesday, 3 August 1938</b>	<b>At Mt. Rainier National Park, Longmire.</b>
MM	<p>3818 mls. Driving down to West road – 6 mls. from Longmire to start. Just below the Columbus Tree – 8 ft. in diameter, 700 years old are some good deer fern. On the West road beautiful red alder – a fine drive. Round Pass. 4000' start of L. George Trail. The road went down for some distance to the Puyallup river and then climbed again to 3700' at the end of the road 15 miles from the turn. Here we started on a 3 ½ mile walk to Klapatche Park. We had no idea of the nature of this walk and found we climbed almost steadily, but the trail was good and for the most part not too steep. The first part was in shade through the forest without much undergrowth, but before long the ferns and flowers began and the path was reminiscent in some ways of Bertha Lake walk. As we went on Will found the flowers in good shape of a <i>Corydalis</i> a plant that grows 2-3 and more feet high with beautiful soft spreading divided leaves which flattened and shone in the sun. These grew in great masses all over the steep slopes of gullies, rocks on either side with some moisture. The walk was a continuous flower bordered one, one place across an open stretch and then up again. There is a beautiful view of the Mountain when you reach the peak where there is nothing but a stone or two and a shed like shelter for hikers of the Wonderland Trail, of which this walk is a part. We walked on up about half a mile farther around the side of a high pinnacle till we came in full view of Mt. Rainier again. Here we rested and ate our lunch. It was a great climb but well worth it. Will, to his great delight, found a number of new plants some of which he had hoped to see. I'll try to list the flowers we saw on this fine walk – Avalanche lily, Beargrass, 2 Spring Beauties, 5 Pedicularis, 2 Asters, 2 Beardtongue, 2 Mimulus, 2 Lace Flower, 2 Indian Paint Brush, 3 Saxifrage.</p>
WCM	<p><b>U170.</b> <i>Corydalis Scouleri.</i> A dense mass on a moist rock slide on the trail to Klapatche Park. See note under 5096 Botanical Record. In relationship to the great masses of leaves the flower clusters are not conspicuous. They do, however, add a touch of color, and when closely examined prove interesting. In color they vary considerably. General color is "Wine Red" or paler, to a shade much more intense than our example, total length 1 ¼ ", the tips of the lips and the point between rather whitish. The flowers are attached at a point underneath one flower I have just examined, the point of attachment was ½" from the tip of the lower lip and 9/10" from tip of the spur. This large flower is therefore 1.4 inches. The flowers point downwards often at an angle of 45°. With a little fancy one might think of them as ready to dive, head thrown back, hands together in front (lower lip) and a jaunty white tipped cap on the back of the head. 1/10 sec. F16. Superpan. We discovered that the seeds were dislodged in an interesting way. A touch would cause the fruit to separate from the stem. Instantly, the two halves would curl with violence towards the tip and the seeds would be flung out. There seemed to be no twisting to the broad walls.</p>

Entry **5096** from the Field Note Book (applicable to plant photograph **U170**). *Corydalis scouleri*. In moist gullies where the rockslides had opened up the forest letting in a little more light. Here they often formed dense almost pure masses of soft beautiful foliage. The plants grew 4 or 5 feet high sometimes very soft in texture. The hollow stems snapped at the slightest pinch between thumb and finger. We found that some of the leaves were two feet across. The flower has a long spur and the total length of the flower is about 1 ½ in. Some of the leaves, principally the lower ones were distinctly bluish in color, others a lively even a yellowish green.

**U170.** Specimen may be found at UA Herbarium Museum

### Specimen Details

**Record Type:** specimen; photograph

**Family:** Papaveraceae

**Scientific Name:** *Corydalis scouleri* Hook.

**Collector:** McCalla, William C.

**Collector Number:** 05096

**Date Collected:** 1938-08-03

**Locality:** North America: United States, Washington, Mount Rainier National Park

**Site Name:** Mount Rainier National Park: Site 6

**Site Description:** Moist gullies (where rock slides had opened up the forest and let in more light) along trail to Klapatche Park, Mt. Rainier National Park.

**Accession Number:** 57696

**U170.** Image of pressed flower at UA Herbarium Museum



**U171.** Another bank heavily covered with this *Corydalis* with lusty plants of Cow Parsnip above, the waterleaf on front may not be in the picture. This photograph was taken on

the way down, all shaded, but the light coming from pretty well in front. ½ sec. F 12.5. Superpan.

**U171.** B/w photo at MN. V. 1.4.29

**U171.** Image of pressed flower at UA Herbarium Museum



**U172.** *Gilia Nuttallii* Gray. A nicely rounded plant by the edge of the Wonderland Trail beyond Klapatche Park. 1/50 Sec. F10. Superpan. Full sunlight.

**U173.** Another picture of this *Gilia* along the same trail. Associated plants – Bistort, Avalanche Lily, Potentilla, Leafy Aster, Western Anemone, Green Hellebore, Valerians, Arnica and the blue Veronica. 1/25 Sec. F15. Superpan. Bright sun.

**U173.** B/w photo at MN. V. 1.9.28.

**U174.** Mt. Rainier from the Wonderland Trail where we had our lunch. 1/25 sec. F 16. Isos 2. Superpan. Bright sun, almost directly behind my shoulder.

**U175.** Mt. Rainier from Klapatche Park. Looking across the pond, much ruffled by wind, and the flowery meadows beyond. Some stunted Alpine Fir in the foreground. 1/25 Sec. F12. Isos 2. Superpan. Bright sun.

**U175.** B/w at MN. V.2.9.26.

**Thursday, 4 August 1938**

**At Mt. Rainier National Park, Longmire.**

MM

Gas at 3874 just outside the park gate as we went to **Ashford** for food. Found a poor specimen of the “Barber’s Pole” saprophyte plant Will is so anxious to find, in the woods along the west road starting up the trail to Indian Henry’s. Shall hope to find better later.

		<b>Listed Expenses</b>	
		Food	6.48
		Milk shake and Bread	0.60
		Cards and Stamp	0.66
		Ashford, Washington	
		Ashford, Washington	
		Ashford, Washington	
WCM	<p><b>U176.</b> Trunks of the Western Hemlock in woods near the start of the Indian Henry Trail. The central one is 8 ft. C.B.H.<sup>5</sup> The bark pattern is attractive. Part of the bark is in shadow and part in sunshine. The moss at the base is mostly the species which I pressed on Sunday. The tall blue fruited huckleberry is the chief ground cover. Pine Drops are quite abundant in these woods. The bark is greyish brown without much suggestion of red. 1 sec. F12.5 Superpan.</p> <p><b>U176.</b> B/w photo at MN. V. 2.3.</p>		
<b>Friday, 5 August 1938</b>	<b>At Mt. Rainier National Park, Longmire.</b>		
MM	Photographed details of 9 plants in the Community Hall.		
WCM	<p>Photographed in the Community Hall. Good light from a large plate glass window on the west end.</p> <p><b>U177.</b> <i>Epilobium luteum Pursh.</i> (5108). 1 sec F13. Superpan. 30 % 10 ½ inches from outside flower to flower.</p> <p><b>U178.</b> Another <i>Pursh.</i> A closer detail of two of these stems 5 5/8 in. from flower to flower. 3 sec F22. Superpan. 65% N.S. leaves, fairly deep richer yellowish green, somewhat lighter and shining on the under surface. Stem quite light green. The ovaries "stem like" are tinted red-purple usually on one side. The sepals are pale green like the stem, petals which are notched and which exceed the sepals are "Canary Yellow" like the deeper part of our sample. The Anthers are a deeper yellow like pale gold, filament and broad four parted stigma which protrudes are almost the same color as the petals. The flower is rather funnel form. Description of habitat in the Botanical Notes.</p> <p><b>U178.</b> B/w photo in MN. V.2.5.6.</p> <p><b>U179.</b> <i>Corydalis Scouleri Hook.</i> Two racemes of flowers with some of the foliage at the base. 1 sec. F12 Superpan. See No. 5096 for rather full description, also under U170. About 1/3 N.S. The flower cluster to the right is one of the deepest, and the one to the left, one of the lightest toned. In every case the deepest tone is on the lips just beneath the whitish tips. The upper petal is short the lower one is prolonged into the spur. The two inner petals are small and white attached at their tips enclosing yellowish stamens, which show cream color (faintly) through the translucent texture of the petals.</p> <p><b>U179.</b> B/w photo in MN. V. 1.4.30.</p> <p><b>U180.</b> <i>Pedicularis contorta Benth.</i> Flowers 6" across the cluster. 1 sec. F14. Superpan about 40% N. S.</p> <p>Stems are green usually tinted with fairly bright purple brown, the olive green leaves are also more or less tinted with brown. The bracts among the flowers and tips of the calyx are a medium green, the rest of the calyx is almost as light as the petals which are a pale cream color somewhat spotted with purple on the inside, the markings showing faintly on the outside. There is a distinct side curve or twist to the beak which, however, does not usually protrude from between the lower petals.</p>		

<sup>5</sup> C.B.H. Circumference at Breast Height

U180. B/w photo at MN. V. 1.11.7.



U180      *Pedicularis contorta* Benth.  
Flowers pale yellow.

**U180.** Lantern slide at PAA. PR 2007.0257/58.



**U181.** Three species of *Pedicularis* placed together in a group 7" across the flowers. At the left are 3 stems of *P. ornithorhynca* Benth. (5061), in centre *P. contorta* (5060) a single stem, at right 2 stems of *P. rainierensis* P. r. W. (**5101**). 1 Sec. F12. Superpan. As to color, the stems of the other two are a deeper purple than those of *contorta*, and the same is generally true of the leaves, the leaf stems being as purple as the main stem. In *P. rainierensis*, the bracts and calyx are quite hairy and both are a rather dull yellowish green, the tips being sometimes dull purple. The corolla is yellow much like "Yellow Lake", the anthers showing through make the rounded hood look somewhat darker. There is no long beak but the tip of the pistil usually projects a short distance. The lower petals are quite small and short, forming as usual the three-lobed lower lip, the "lip" in this case being erect. *P. Ornithorhynca* – the stems here are just as purple as the last but greyed or softened by more copious white hairs, this applies to the calyx and bracts and they also are a duller and more purple toned green than either of the other species. The corolla, general color is purple, the lower 3-lobed lip in this case widely spreading and deflexed, is probably a combination of "Magenta" or "Cherry Red" touched off at the tip of the middle lobe and the base of the lateral lobes with a richer tone, say, "Wine Red". The upper lip, beak-like, is of this richer color with decidedly lighter shading on the sides. The slightly protruding style is purple and the stigma, cream colored.

**U182.** *Pterospora andromeda* Nutt. Pine Drops. 3 stems, 2 living and 1 last years with empty seed vessels. 6 in. extreme width. ½ Sec. F9 Superpan. The colors mentioned under No. **U168** with the exception of the corolla, are softened by the short white extremely glandular hairs. The dead stem and empty fruits are a warm brown. "Burnt Umber" with "Bismarck Brown" will make it.

**U182.** B/w photo at MN. V. 1.8.30.



U182 *Pterospora andromeda* Nutt.

Pine Drops, almost natural size, showing two flowering stems and one of the previous year with empty seed capsules. Stems are red or reddish-purple, calyx pink or red, corolla dull-cream or ivory-white.

**U182.** Lantern slide at PAA. PR2007.0257/104.



**U183** The only plant of the Barber's Pole that we have thus far found. It is 16" high. 1 Sec. F13 Superpan grey back. The stem is white striped with red "Velox Scarlet" with some "Arbutus Pink". The red stripe is broadest just above each bract which are very dark brown with somewhat lighter edges. The lower and older flowers, indeed, in this case more than  $\frac{3}{4}$  of the flowers are very dark purple, almost black, indeed, in their general effect, except for the white stem and calyx. The persistent stigma seems to be jet black. The younger flowers at the top have white filaments and some of the sepals have a touch of red. The anthers which persist for a long time are just as dark as the dark purple ovary.

**U184** *Monotropa hypopitys* L. Many flowered Indian Pipes found in the same woods with the other two. Height of plant to the right 3  $\frac{1}{2}$  in. 1 sec. F 11. Superpan. 70% N.S. The block from which they are growing was brought from the forest. The moss is the one which I pressed, **5077** and the fallen leaves are chiefly hemlock with a few odd pine. Moss is rather olive green quite light on the tips. The stem on the right is the freshest and most beautiful in color. The floral leaves are a delicate cream. In texture they are soft and beautifully fringed with short hairs. The large stigma is yellow of medium tone. It is the pink bracts that give to the flower cluster its chief beauty, a dilute "Cardinal Red" would come nearest. The bracts on the stem, which is a little

browner than the flowers are also slightly duller than those among the flowers. The other two flowering stems are warmer in the flower shades, the bracts being almost as deep as our sample of "Cardinal Red", stems are also creamy pink.

Entry **5116** from the Field Note Book (applicable to plant photograph **U184**).

*Monotropa hypopitys* L. Indian pipe on the drier banks of the same woods (Indian Henry Trail, about 3300 ft.)

**U184.** B/w photo at MN. V. 1.8.32.



U184      *Monotropa hypopitys* L.

Many-flowered Indian Pipe      X 1.2

Whole plant flesh-colour tinged with pink and red.

Woods along Tahoma Creek, Mt. Rainier National Park,  
Wash. Aug. 5, 1938.

**U184.** Lantern slide at PAA. PAA PR2007.0257/56.



**U184.** Specimen may be found at UA Herbarium Museum

### Specimen Details

**Record Type:** specimen; photograph

**Family:** Ericaceae

**Scientific Name:** *Monotropa hypopitys* L.

**Collector:** McCalla, William C.

**Collector Number:** 05116

**Date Collected:** 1938-08-05

**Locality:** North America: United States, Washington, Mount Rainier National Park, Mount Rainier

**Site Name:** Site details blocked; for information contact ALTA

**Site Description:** Site details blocked; for information contact ALTA

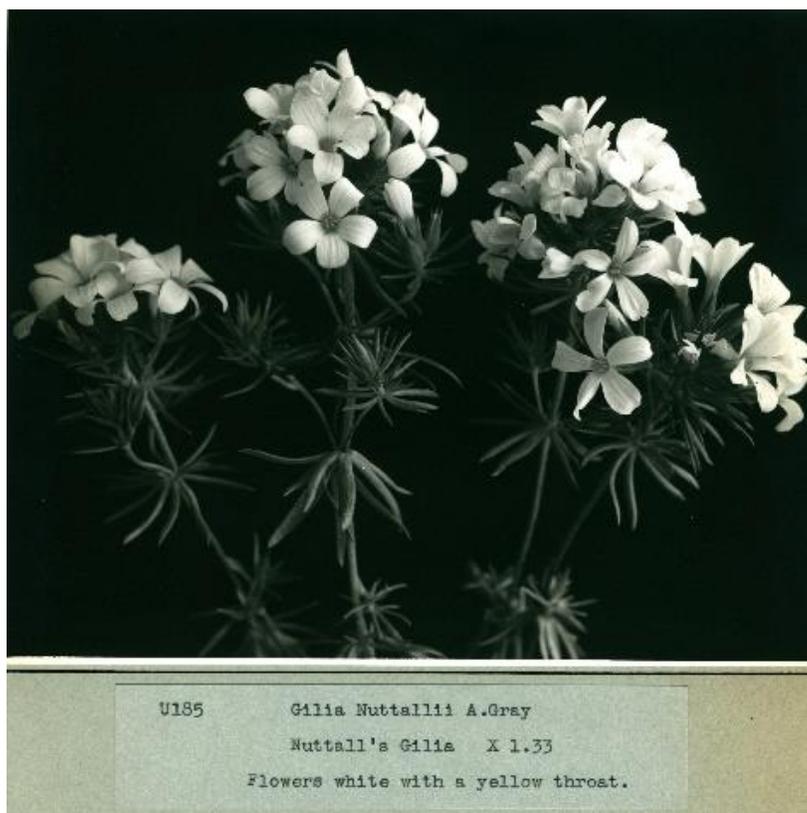
**Accession Number:** 63021

**U184.** Image of pressed flower at UA Herbarium Museum



**U185.** *Gilia nuttallii* Gray. The group, 5 ½ in. in width, for description see Botanical record 5015. 1 sec F12, Super pan. 70% N.S.

**U185.** B/w photo at MN. V. 1.9.29.



**U185.** Lantern slide at PAA. PR2007.0257/104.



	<p><b>U186.</b> The top of a stem of Pine Drops. Natural size. 1 sec. F11. Superpan. This stem grew in the same woods noted before and was 42 in. in height. It is one of the stems that appears in <b>U182</b>.</p>
<b>Saturday, 6 August 1938</b>	<b>At Mt. Rainier National Park, Longmire.</b>
MM	<p>Another bright morning. Setting out for L. George. We drove to Round Pass on the west road, parked the car then walked a little over a mile to the Lake. It is not a hard walk, but there were really no flowers. The lake is quite fine, a deep green color, not very large – said to be good fishing. There was a mountain on the one side &amp; Will took a photograph from a point showing this. We walked part way around over a rough “scrambly” path. It was cold up there but we found a sheltered spot to eat our lunch. On the way back Will photographed some tree trunks – Hemlock, Pine and Fir. We got letters from Ethel and Mary today. Ethel writes that Margaret has been and still is very ill but somewhat improved – appendicitis for which they will operate as soon as possible. Mother has been poorly again. Mary had to cut her holiday short. Went to the program – a miscellaneous one.</p>
WCM	<p><b>U187.</b> View of Lake George through the trees. Red Cedar at the left and above, Alder at the edge of the water, a row boat showing near the centre. 1/50 sec. F12.5. Isos2. Sun directly in front and overhead. Superpan press.</p> <p><b>U188.</b> Branches of the red Elderberry by the side of the West road. Leaves deep green, stems carrying the fruit and to a lesser extent the main stem and leaf stems are a rather dull purple. The fruit is a rich bright red “Scarlet Vermillion” and “Vermillion Brilliant Red” might give it. 1/50 sec. F9. Bright sun. Superpan.</p> <p><b>U189.</b> A trunk of Western White Pine in the forest on the shore of Lake George. 77” C.B.H. <i>Menziesii</i> and <i>vaccinium</i> show at the base of the trunk and at the right, Western Hemlock branches at left. 1 sec. F8, Superpan. No sunshine.</p> <p><b>U189.</b> B/w photo at MN. V. 1.2</p> <p><b>U190.</b> <i>Campanula Scouleri</i> Hook. On a bank in the Lake George forest. A small Hemlock grows just behind and above. 2 sec. F11. Cloudy. Superpan. Leaves are a fresh fairly deep green, the Corolla is an extremely pale blue with a suggestion of mauve rather than bright blue. Tips of the petals show a little more color than the rest of the flower. Anthers and stigmas are a pale cream colour.</p> <p>Entry <b>5118</b> from the Field Note Book (applicable to plant photograph <b>U190</b>). <i>Campanula Scouleri</i> Hook. Growing in a rocky bank in the forest on the way to Lake George. About 4100 ft. Photographed.</p> <p><b>U190.</b> B/w photo at MN. V.1.11.25A.</p> <p><b>U190.</b> Specimen may be found at UA Herbarium Museum</p>

	<div style="border: 1px solid black; padding: 5px;"> <p><b>Specimen Details</b></p> <p><b>Record Type:</b> specimen; photograph</p> <hr/> <p><b>Family:</b> Campanulaceae</p> <hr/> <p><b>Scientific Name:</b> <i>Campanula scouleri</i> A. DC.</p> <hr/> <p><b>Collector:</b> McCalla, William C.</p> <hr/> <p><b>Collector Number:</b> 05118</p> <hr/> <p><b>Date Collected:</b> 1938-08-06</p> <hr/> <p><b>Locality:</b> North America: United States, Washington, Pierce County, Lake George</p> <hr/> <p><b>Site Name:</b> Lake George area: Site 2</p> <hr/> <p><b>Site Description:</b> Rocky slope in the forest near Lake George, west side of Mt. Rainier.</p> <hr/> <p><b>Accession Number:</b> 65586</p> </div> <p><b>U191.</b> The trunk of a Noble Fir in this same forest. 100 in. C.B.H. The color of the trunk is brown with something of a red purple tone. The plates of old bark flake off easily and I carried one of them away with me, which see ___. An old rotted log now reduced to reddish and tan colored shreds lies against the upper side of the trunk. Hemlock foliage shows at the right, moving in the wind and a young fir tree at the left. 1 sec. F9. Superpan. No sunshine.</p> <p><b>U191.</b> B/w photo at MN. V. 2.2.3.</p>
<b>Sunday, 7 August 1938.</b>	<b>At Mt. Rainier National Park, Longmire.</b>
MM	<p>Cool &amp; cloudy this A.M. but it looks as though it may clear. One feature of this camp is the many hemlock trees which are constantly dropping dried needles over everything. The fly of the tent is covered with them. Douglas Fir and a little cedar also in the camp. Mailed a letter to Ethel. After the morning chores, lunch made we set out for Paradise Valley. Parked the car before the bridge over the stream that runs through the valley meadow and walked down there. The red and yellow mimulus were the grandest masses and individual clumps along the main and other little streams. It is an impossibility to express, in words, the beauty of these streams and flowers. Lupine, Indian Paint brush, Valerian, senecio, etc. that form the beautiful meadows above Paradise are lovely there too. Will took a lot of photographs of the two species of Mimulus &amp; of the Mountain with flowery foreground. The Mountain was abound by cloud most of the day, but came out in all its glory for ½ or ¾ of an hour. Quite cool in the evening. It was lovely down below at noon as we sat in the shelter of fir trees in the sun eating our lunch. A Washington couple camped by us came &amp; sat by our fire for an hour or so in the evening.</p>
WCM	<p><b>U192.</b> <i>Mimulus tilingi</i> Regel. Yellow Mimulus against a blue grey stone. Two or three stems with a flower each of <i>Mimulus Lewisii</i> rise from the back of the yellow cluster. Slender chickweed at edge. 1/25 sec. F11. Bright cloudy. Superpan.</p> <p><b>U192.</b> B/w photo at MN. V. 2.6.35 and V. 1.11.8</p> <p><b>U193.</b> Another group of the Yellow Mimulus among the same kind of rocks. The sand between is wet and therefore darker. Fresh yellow green moss shows here and there. 1/25 sec. F16. Bright sun. Superpan.</p>

**U194.** *Mimulus lewisii*. With Yellow Mimulus in front and groups of the little *Epilobium* in front and at right. A fairly dark greyish rock forms part of the background. 1/50 sec. F11. Superpan press. The stems of Mimulus rather light yellow green, leaves rather deep green on top much lighter beneath. Calyx is usually quite dark brown of a purplish tone but a dull rather than a bright purple brown. There is much variation in this, the upper exposed part being, of course, the deepest color and the ridges deeper than the depressions between. The latter are often greenish and sometimes brighter purple brown than the ridges. The corolla is yellowish at the base of the tube where it is covered by the calyx, a faint yellowness extending up on the underside. The under half of the tube is spotted with small purple spots, and the two folds in the throat of the lower lip are yellow, but these extend only to within about 1/8<sup>th</sup> in. of the division between the lobes and the lower lip which also has a few scattered white hairs. The corolla is generally rosy red. "Old Rose" comes nearest of our samples but lacks depth and perhaps brightness. The darkest tones are at the center of the base of each corolla lobe. The lower portion of the tube is lighter than the upper and the spots show through to some extent. The upper part of the tube is paler than the lobes and becomes lighter towards the calyx.

The little *Epilobium* has rather bright green leaves, pale stems although both may be heavily tinted with rich reddish brown. The flowering stems, ovaries, calyx and the ripening seed pods are nearly always richly so tinted. The corolla is "Magenta".

**U195.** *Epilobium luteum Pursh*. On a gravel bar. A splendid rounded clump of many stems in fine flower. The entire group was about 30 inches across. The colors have already been given in detail. Standing in open sunshine the top of the calyx and of the ovary showed a little purple brown tinting. 1/100 sec. F11. Bright sun. Very windy. Super pan. Press.

**U195A.** B/w photo at MN. V. 2.5.5.

**U196.** A photograph showing the gravel bar with Yellow Mimulus in the foreground and the *Epilobium* clump in **U195** in background. Running water shows on both sides. 1/25 s. F16. Bright sun. Superpan.

**U197.** *Mimulus lewisii*. Perhaps the most beautiful single mass which we saw during the whole day. At the edge of a little sunken stream of water wandering through the flowery meadow. The rocks in the water are covered with a dark moss, almost black, the moss at the edge of the water being bright yellow green. A group of Gentian may show at the upper left. 1/50 sec. F8. Bright sun. Superpan.

**U198.** *Gentianna calycosa Griseb*. Blue Gentian along the same little sunken stream. The same light green shows at edge of water. Part of the bank behind is brown. 1/25 Sec. F8. Sunshine. Superpan. The stems are fairly deep reddish brown which extends more or less over the calyx, but the calyx lobes are greener. Leaves are a medium green much the same color on both sides, perhaps we might call it fairly fresh grass green. The corolla is very difficult to describe. The outside of the tube in bud is quite dark, as it opens the uncovered portion is much lighter and the part of the lobe which was covered in bud is also a lighter blue. Inside the tube is pale almost whitish with blue lines and dull yellow green spots. The filaments are deep blue and the anthers creamy. They do not, of course, show unless you look down into the heart of the flower. The ovary is pale greenish with dull blue lines as it elongates, the two spreading stigmas are creamy green. These do not ripen till the pollen has been discharged. By that time they

are about ¼ in. above the anthers. "Navy Blue" with some "Velox Dark Blue" would give the richer tones, less of the latter for the lighter flowers. The lobes on the inside are more or less dotted with white.

**U199.** Mt. Rainier from the flowery meadow where we spent the day. Mountain Erigeron are quite conspicuous in the foreground. A mass of Lupine may be too much darkened by the filter. The Mountain had been hidden up till now and cloud masses still rest on the shoulders. 1/25 Sec. F11. Isos 2. Superpan.

**U200.** Mt. Rainier with a different foreground, namely the stream and gravel bars, the latter gay with Yellow and Red Mimulus. The wall of the valley with fresh green vegetation broken by clumps of dark Alpine Fir is very beautiful. We longed once again for a color filter that would render such a scene in accurate color. 1/25 Sec. F10. Isos 2. Sunshine. Superpan.

**U201.** The same scene without a filter. 1/25 Sec. F12.5. Superpan.

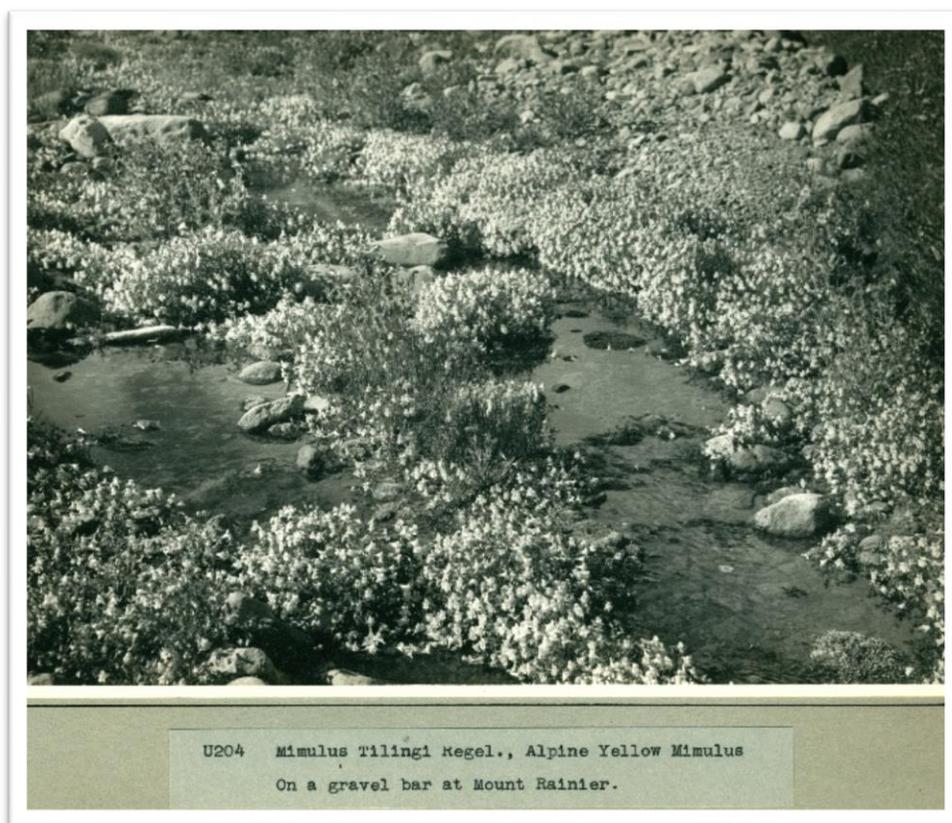
**U202.** *Mimulus Lewisii Pursh.* Along the same little stream bed wandering between green banks several beautiful clumps on either side. The water showed dark, it is to be hoped it made a suitable background for some the flowers that overhung. Fresh yellow green moss again shows along the edge, sedges, a few erigeron with dwarf willows on the flanks. 1/30 Sec. F16. Bright Sun, superpan press.

**U203.** Masses of Yellow *Mimulus* on a gravel bar in quiet water. The flowers touch each other, thousands of them petal to petal. 1/25 Sec. F14. Sunshine. Superpan. [*Mimulus tilingi regal.* added later in pencil]

**U204.** A more general view of this same gravel bar. Lines and masses of the Yellow *Mimulus* with a few red ones, little clumps of the small Epilobium add richness with their rich red stems. The grassy bank at right is dotted at right with the low blue aster. Again we longed for color film. 1/50 F16. Bright Sun. Superpan. Press. These 14 films were exposed during our day in the beautiful meadow which lies just below the buildings at Paradise, therefore the altitude of about 5000 ft. +.

**U204.** B/w photo at MN. V.2.6.34.

**U204.** B/w photo at MN. V.2.6.34.



**Monday, 8  
August  
1938.**

**At Mt. Rainier National Park, Longmire.**

MM

Fire Whistle was sounded about 11 last night. This morning we found there was a fire near Ashford. Smoke came in rather thickly. This morning is bright and clear and not warming up. We came over to the Community House to photograph some of the flowers brought down yesterday. Afterwards and in the afternoon wrote notes to date then took the Trail of the Shadows – a very easy woodland path, short & level takes you past the Longmire log cabin homestead and the mineral springs. In evening went to the lecture on the forest. A different Naturalist spoke and was very good. Dr. Bodenburg did the forests last week.

WCM

In Community House.

**U205.** *Mimulus lewisii* Pursh. 1 sec. F14. Super pan. Flowers are about 1.4 in. across.

U205. B/w photo at MN. V. 1.10.45.



U205      *Mimulus Lewisii* Pursh  
Lewis' *Mimulus* X 1  
Flowers pink to deep rose-red.

Edge of little stream in meadow, Berkelsy Park,  
Mount Rainier, Wash. Aug. 20, 1938.

U205. Lantern slide at PAA. PR2007.0257/134.



**U206.** *Castilleja oreopola*. 1 sec. F11 Superpan. 7 ½ in. extreme width. Stems are greenish below more or less shaded with dull purplish from above. Lower leaves are rather a bright green, but above where they become bracts subtending the flowers they become more tinted with somewhat the same brown color. The bracts among the flowers, that is the undivided part is a greenish brown, the same is largely true of the tube of the calyx. The lobes of both bract and calyx which give to the plant its brilliancy are called cerise in color. We have no sample just like it, "Arbutus pink" would certainly form the basis but it should be reddened and enriched with something else, perhaps a little "Velox Scarlet" and "Wild rose Pink". The projecting parts of the flower are yellow green with a reddish purple line on the underside bordering a lower narrowly V shaped patch of white.

**U206.** B/w photo at MN. V. 1.10.47.

**U207.** Fruiting heads of Western Anemone. 1 sec F11. Super pan. 8 in. across. Foliage dark green on top and lighter below softened by long spreading hairs, stems a light yellowish green, quite hairy. One or two of the stems have minute spots of purple brown. The plumose tails are in general a very pale green, one of them somewhat yellowish green, the others without much yellow tint. Each of the three heads is riper at the top than lower down and here especially the fruits and the tails are distinctly reddish brown when closely examined. The light colored almost white hairs with which they are fringed largely control the colour as it appears at a distance, making the name "Toehead Baby" quite appropriate. "Bottle Brush", "Feather duster".

**U207.** B/w photo at MN. V. 2.2.29.

**U208.** *Gentiana calycosa* Griseb. Blue gentian. 2 ½ sec F16. Superpan. 6 ¼" bud to bud. The description already given but on again comparing to some samples overlooked, it would seem that "Violet" full strength or dilute would be better than the shades already referred to.

**U209.** Another Gentian group much the same as the previous one. 1 sec. F11 Superpan.

**U210.** *Spiraea densiflora*. 2 or 2 ½ sec. F 16. Superpan. 6 1/8" extreme width. Stems are green at first, now a light somewhat yellowish brown becoming more red purple up towards the flowers "Verona Brown" + a little "Velox Flesh" for the lower part and a little red darkened perhaps for the upper portion. Leaves a deep green on top somewhat lighter beneath. Flowers "Old Rose" + "Wild Rose Pink", the color is softened and somewhat dulled by the very numerous anthers which become creamy brown, although at first they are much the same as the petals. The slender filaments are rosy.

**U210.** B/w photo at MN. V. 1.5.37.

**Tuesday, 9  
August 1938**

**At Mt. Rainier National Park, Longmire.**

MM

Took an extra hours rest this morning. Got up about 8:30. After breakfast drove up the Paradise road. Will is now trying to get a picture of the cones at top of a Lovely Fir. The morning is bright but still smoky. The mountain is thickly veiled though you can see a "ghost" mountain through the smoke giving a weird effect. We went on up to Paradise and walked part way up the slopes, mostly through the flowers which are much dried up in the 10 days since we were there before. Got a few photos then went down & Will collected some plants in the low meadow where we spent Sunday. I wrote and mailed letters to the girls at home and Mary.

WCM	<p><b>U211.</b> The upper part of Sub. Alpine Fir tree with cones on the top. These are dark purple with much gum exuding. 1/25 sec. F11. Distar Superpan. Sunshine.</p> <p><b>U212.</b> A flowery bank above a little rocky stream in Paradise Valley. 1/25 sec. F12.5. Super pan. Bright sun. The following plants show – Cerise Paint Brush, Mountain Daisy, Blue Lupines, Red Mimulus on extreme left. Other plants which may show: Valerian, Arnica, Senecio, Ligustrina, Veronica and a little Saxifrage.</p> <p><b>U213.</b> <i>Aster ledophyllus Gray</i>. Mountain Aster. A pretty group at the base of an Alpine Fir, the new growth of which is a pretty blue in the sunlight. 1/100 sec. F10. Superpan Press. Bright sun.</p> <p><b>U214.</b> A mat of Alaska <i>Spiraea</i> on a sloping hillside. The finely cut leaves, a lovely green cover the ground almost like sod, the flowering stems standing stiffly erect. Cerise Paint Brush shows in the back ground. Pale green leaves, purplish fruits of avalanche lily at right. 1/50 Sec. F16. Sunshine. Superpan press.</p> <p><b>U215.</b> Another flowery slope along a little, now dry, water source. 1/50 Sec. F16. Superpan press. Sunshine. The flowers are fleabane daisy, cerise paint brush, scattered individuals, blue lupines especially in right middle distance, others show elsewhere, red mimulus against rock, some valerians, bright yellowish moss in stream among the rocks, which are grey, brown, and reddish brown. Some mountain ash in fruit at base of trees which show above.</p> <p><b>U216.</b> <i>Erigeron salsuginosus</i>. Mountain Daisy in an attractive clump just at base of a small Fir tree. Brown needles on ground in front. 1/10 Sec. F10. In shade. Superpan press. Foliage a medium green much the same on both sides, central view lighter. Stems, a lighter yellowish green, faint purple in thin lines on some of the stems near the base. Bracts, green with a tiny purple tip, bracts are spreading and sometimes recurved. The discs are mostly brown now with yellow only in the centres. Rays “Wisteria”.</p> <p><b>U216.</b> B/w photo at MN. Vol. 1.11.44.</p>			
<b>Wednesday, 10 August 1938</b>	<b>At Mt. Rainier National Park, Longmire.</b>			
MM	<p>A fine bright morning, with the smoke cleared away, at least for the present. The mountain stands out clear &amp; glistening this morning. We are in the Community House photographing the plants we brought down yesterday. Veronica, Alaska Spiraea, Aster, ?, Pedicularis bractiosa, valerian, lace flower and Gentian, Erigeron, Saxifrage. After lunch we read an installment of The Wodehouse story (which, by the way, is not so funny as some). Then pressed plants, wrote up the notes etc. In evening we went to the lecture on the animals. Very good. Got letters from Edith, Fred, Dency, a card from Jessie B., and to my great joy there was a letter from Margaret herself, who is much improved, and was at Enid &amp; Arthur’s when she wrote. We are so thankful. Mailed a letter to Helen S. &amp; Will wrote to Mother.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Fruit and vegetables</td> <td>1.55</td> <td>Longmire, Mt. Rainier</td> </tr> </table>	Fruit and vegetables	1.55	Longmire, Mt. Rainier
Fruit and vegetables	1.55	Longmire, Mt. Rainier		
WCM	<p>The following were taken in Community House.</p> <p><b>U217.</b> <i>Veronica Cusiskii Gray</i>. About natural size. 3 secs. F16. Superpan. Leaves deep green above somewhat lighter beneath, stems dark, dull, purplish above and somewhat lighter brown between the leaves. Calyx same as upper stem, corolla has a white or</p>			

very light creamy green eye, this is surrounded by a shaded ring of very deep violet, lobes of corolla "Heliotrope" with some "Violet" added to give a bluer tone, thin violet veins run from the centre to the edges. The two filaments and the long style are colored much like the corolla lobes, even the anthers have violet tints on one side, whitish on the underside and the end of the pistil is also whitish.

**U217.** B/w photo at MN. V. 2.6.40.

**U218.** Alaska *Spiraea*. Leaves rather bright green, stems rather strongly tinted reddish brown often quite bright especially among the flowers. Bracts, outer calyx, bright green, petals white, centre of flower pale rather dull yellow, ovaries green, filaments white, anthers warm cream, a warm reddish brown when empty, unopened buds are tinted red brown. 2 ½ Sec. F16, Total height 4 3/4 in.

**U219.** *Pedicularis bracteata*. 2 ½ Sec. F11 Superpan. Fruiting spikes 6 ½" long. Foliage dark green above, somewhat lighter on undersides, stems lighter green, but the flowering stem is purple brown towards the top. Calyx also is light green with minute purple tips in some cases. Flowers are creamy green scarcely deep enough to be called yellow. In the fruiting spike calyx is quite a pale green, paler than in the other. The projecting hooked ovary is a deeper green; withered flowers are brown.

**U220.** *Pedicularis racemose*. 3 Sec. F16. Superpan width 7 in. about 45%. Foliage is a deep green somewhat lighter on the underside, but for the most part darkened by dull reddish brown tinting. The stems are quite red brown, "Wine Red" with "Burnt Umber" might give it. Calyx is pale green more or less tipped with brown. The three-lobed lower lip is broad and widely spread. The inside varies from almost white in the greener plants (ours however, are slightly browned) to a light pink mauve. On the outside the color is even deeper and brighter. Dilute "Cherry Red" for the inside with a little "Wine Red" added for the outside. The upper lip is whitish green at the base, its curling beak much like the inside of the lower lip, but the center, where the anthers show through to some extent, is more deeply tinted.

**U220.** B/w photo at MN. V. 1.11.3.

**U221.** *Valeriana sitchensis*. 2 sec. F16 Superpan. Width across leaves 9 ½ in. Leaves and stems, one thin the other hollow, a fresh green, bracts and calyx also green their tips brown, more or less. Flowers are white, corolla, stamens and pistil. The unopened buds are a delicate pink mauve tint which persists slightly in some of the corollas. It has a pleasant fragrance.

**U222.** "Queen Anne's Lace" as it is called here. This plant like the former number is abundant here and adds airy grace to the flowery meadows. The leaves are a fairly deep green lighter beneath. Stems lighter green with sometimes dull brown shadings. The petals are white as are the filaments, anthers light cream color, ovaries pale green. These together with the green flower stems give a somewhat greenish white appearance to the umbels. This is very apparent when they are placed behind the Valerian, the latter then showing its pinkish tinge. 2 Sec. F16. Superpan. Same relative size as former.

**U222.** B/w photo at MN. V. 2.5.15.

**U223.** *Aster ledophyllus Gray*. 2 ½ sec. F6. Superpan. About the same relative size but see specimens. Leaves, deep green on top, grey woolly beneath. Stems fairly deep

	<p>green without much purple shading. The bracts somewhat lighter green with their edgings of purple brown. Just along the involucre the whitish pappus shows. The discs, yellow at first are now browned more or less on the outside, yellow only in the inside. The corolla of the floret is pale yellow, the projecting anthers are orange yellow, later becoming purplish brown. Rays are "Wisteria Violet" or slightly deeper than our sample.</p> <p><b>U224.</b> <i>Senecio triangularis</i>. 2 ½ sec. F16. Superpan. 9 ½ in. across the flowers. Leaves vary somewhat from a deep green above to a fresh green, always lighter underneath. Stems a little lighter than the leaves, if in sunlight lined with red brown, more or less. Involucre much like the leaves, the tips black, discs are orange brown on the outside, orange where the florets have not yet opened in the centre. Rays are bright yellow. Length of rays varies in different plants.</p> <p><b>U224.</b> B/w photo at MN. V. 2.7.33.</p> <p><b>U225.</b> <i>Erigeron</i>. Under No. 216 a general description has already been given. We chose flowers of a pinker tone than is common because they would show up better in the lantern. Discs here are orange in centre where the flowers are not yet open, a ring of newly opened flowers pale yellow and then the tawny or brown ring next to the rays. A considerable amount of "Magenta" must be added to the "Wisteria Violet". 2 Sec. F16. Superpan.</p> <p><b>U226.</b> <i>Saxifraga</i>. 2 sec. F16. Superpan. 7" across leaves at base/ 7 ½" diagonally across the flower cluster. Leaves are a fairly deep green above with lighter veins, much paler green beneath. Both leaf and main flower stem at the base quite a bright red purple, above rather yellow green with a suggestion of brown. Seen through a glass the little flowers show a great variety of color. The calyx is shaded purple brown, the petals and ? filaments, white, the anthers before opening are salmon, afterwards little yellow brown specks, the ovaries at first green soon become rich purple red.</p> <p><b>U226.</b> B/w photo at MN. V. 2.3.17.</p>			
<b>Thursday, 11 August 1938</b>	<b>At Mt. Rainier National Park, Longmire.</b>			
MM	<p>This morning Will set out alone to collect along the West road. I stayed in camp &amp; did some needed cleaning up, washing, airing the bedding, washed my hair &amp; feel better for a bit of personal cleaning up. Had my lunch now &amp; am now going to write to Bill. Will climbed to Indian Henry's and came back pleased with his trip &amp; a case full of flowers. I mailed my letter to Bill. Got letters from Dency &amp; Arthur. Sent cards to Mrs. ? &amp; Margie Scott. Sat by our fire tonight &amp; rather Will spent a good deal of time pressing what he had brought back with him.</p>			
WCM	Nothing recorded.			
<b>Friday, 12 August 1938</b>	<b>At Mt. Rainier National Park, Longmire.</b>			
MM	<p>Wrote up notes etc. in morning. In afternoon Will spent a couple of hours looking over the Herbarium at the Museum. Read a while &amp; went to the program at night.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food (bread, butter, cookies)</td> <td>1.01</td> <td>Longmire, Mt. Rainier</td> </tr> </table>	Food (bread, butter, cookies)	1.01	Longmire, Mt. Rainier
Food (bread, butter, cookies)	1.01	Longmire, Mt. Rainier		

WCM	Nothing recorded.	
<b>Saturday, 13 August 1938</b>	<b>At Mt. Rainier National Park, Longmire.</b>	
MM	Poured rain all day. Read a bit, Will spent some time in the afternoon at the Herbarium & I knitted in the Community House. Spent the evening in our neighbor's trailer.	
WCM	Nothing recorded.	
<b>Sunday, 14 August 1938</b>	<b>At Mt. Rainier National Park, Longmire.</b>	
MM	Dark most of the day but no rain. In the afternoon we walked over the Trail of the Shadows again. Sat by our fire in the evening. Read a bit during the day. <b>Listed Expenses</b>	
	Food (milk, bread, spaghetti)	0.70 Longmire, Mt. Rainier
WCM	Nothing recorded.	
<b>Monday, 15 August 1938</b>	<b>At Mt. Rainier National Park, Longmire.</b>	
MM	A glorious bright morning, everything fresh after the rain. We set out for Gobbler's Knob 5500'. Along the West road to Round Pass, then up the Lake George trail, past the lake 1.8 mls. up thru the forest. A good Trail but we climbed 1500' from the parking place. There is a fire lookout at the rocky top but unfortunately the Ranger was not there so we could not go in. The tower is glass all around, well protected against storms & lightening with grounded wires & braces. There is a magnificent view all around, it is indeed a Rocky Knob. Mt. St. Helens, and Adams was in view where we ate our lunch, tiers of the Cascades, and the foothills of Mt. Rainier, also L. George and three smaller ponds could be seen from the top as well as Mt. Rainier in all its glory. Will found two plants which pleased him. Rainiera – a genus named for the Mt. & the new Composite he found a few days ago. I was fool enough to slip on a loose rock and in falling cut my little finger badly on a sharp rock. This accounts for the writing. Will bound it up with a strip of hanky & I felt rather sick for a while but got over it & got down all right. It will have to be properly dressed at the camp. I am writing while Will is getting gas & groceries just outside the Park. Gas at 4020 mls. 10 gal. at Texaco outside Park gate. On the trails today we were interested to see many cones of the Lovely Fir which squirrels had cut down. Some were whole, 8 or 10 in one spot, some pretty well broken up and one was partly buried. The shiny leaves of the rhododendron were beautiful in the sunlight. Everything was so beautifully fresh after the rain that the walk through the forest was doubly beautiful. Got my finger fixed up, but it was sore & my hand pretty useless. Will got supper & did everything for me besides pressing the plants. Had a letter from Ethel. Margaret is gaining but may have to have an operation in a month or so. <b>Listed Expenses</b>	
	Food	0.90 Longmire, Mt. Rainier
WCM	<p><b>U227.</b> A branch of Elderberry with its dark green leaves and rich red (Crimson) fruits against a dark background of cedar trunk and foliage in shadow. 1/10 sec. F16. Superpan. Bright sun. Along the West road.</p> <p><b>U228.</b> Mt. Rainier from the trail to Gobbler's Knob. Noble Fir chief trees in foreground. Sunshine. 1/25 sec. F 11. Isos 2 Superpan.</p> <p><b>U228.</b> B/w photo at MN. V. 2.21.</p>	

**U229.** *Veratrum viride* Ait. Green hellebore along trail to Gobbler's Knob, 5000 ft. Sunshine, with strong back lighting on the flower stalks. 1/25 sec. F 8. Superpan. Ass. Plants – *Vaccinium membranaceum*, *Rhododendron*, *Valeriana*, *Arnica*.

**U229.** B/w photo at MN. V. 1.1.21.

**U229.** Specimen at UA Herbarium Museum

### Specimen Details

**Record Type:** specimen; photograph

**Family:** Melanthiaceae

**Scientific Name:** *Veratrum viride* Ait. var. *eschscholtzii* (A. Gray) Breitung

**Previously Assigned Sc. Names:** *Veratrum viride* Ait. [original]

**Collector:** McCalla, William C.

**Collector Number:** 05185

**Date Collected:** 1938-08-15

**Locality:** North America: United States, Washington, Mount Rainier National Park, Mount Rainier

**Site Name:** Mount Rainier Area: Site 1

**Site Description:** On west side of Mt. Rainer.

**Accession Number:** 37139

**U230.** *Luina hypoleuca* Benth. A fine mass in good bloom on steeply sloping rock on top (or almost) of Gobbler's Knob, 5500 ft. 1/25 sec. F11. Superpan, sunshine. Rocks and weathered soil warm, dark brown.

**U230.** B/w photo at MN. V.1.13.4.

**U231.** *Rainiera stricta* Greene. A group at bend of the trail just below Gobbler's Knob. 1/25 sec. F14. Superpan, sunshine. *Phacelia*, Leafy aster associated. Alaska Cedar background.

**U232.** A view of Mt. Rainier from a few yards back of this point. The same group of *Rainiera* shows in foreground and Alaska Cedar frames the mountain. 1/10 sec. F18. Isos 2. Superpan.

**U232.** B/w photo a MN. V. 1.13.1.

**U233.** *Rainiera stricta* Greene. Detail in Community House. 8" across lower leaves. 2 sec. F14. Superpan. Stems light green, leaves smooth, bright green, yellowish rather than bluish, much same on both sides. Involucres a duller green, bracts tipped and marginal with light green almost whitish, base or whole of the bract at base of each pedicel purplish at base or along most of its length. Newly-opened flowers are yellow, the anthers golden and style and stigma light yellow. Older flowers turn orange brown then darker. In these plants the top are newly opened as are some flowers at base of raceme the centre ones being golden brown with most to the stigmas still yellow.

**U233.** B/w photo at MN. V. 1.13.2.

**U234.** *Solidago elongata* Nutt. 2 stems, detail in Com. House. 1 sec. F11 Superpan. 6 ¾" from outside to outside of ? tips. Stems purplish brown; leaves dark green only slightly

lighter below; rays bright yellow, the anthers make the disks slightly darker yellow, but the whole effect is bright golden with stems of the flowers yellowish green. The involucre are yellow with a tint of green. A striking and lovely golden rod. The stems of these plants were 4.8" to 5.4" high. Sometimes the inflorescence is longer and more wand like. Beautiful waving in the breeze.

**U234.** B/w photo at MN. V. 1.11.37.

**U235.** *Luina hypoleuca Benth.* 5 stems, largest flower cluster about 2" across. About 42% n.s. 2 ½ sec. F 16. Superpan.

**U235.** B/w photo at MN. V. 1.13.5.

**U236.** Ditto. 3 stems, from outside to outside of fl. cluster 6". 1 sec. F11 superpan almost 50% n.s. Stems and underside of leaves white woolly, upper surface dark, sometimes almost bottle green, but in these plants the upper surface has a light covering of wool, that somewhat grays the green. Involucre gray-green, each bract with a minute reddish brown tip. Flowers and pappus pale cream "just off the white" – anthers yellow, fairly deep, stigmas yellow of a lighter tone. Older fls. turn dull brown but these were fresh. At a little distance the flowers might be called honey-coloured, and they have a faint sweet honey odor.

**U237.** *Streptopus amplexi folius (L.) DC.* Twisted stalk in fruit, one branch of a large plant in forest on trail to Indian Henry's. I kept it fresh since that trip. The position is of course unnatural but graceful. The leaves are naturally horizontal, the fruit hanging beneath the stem. Leaves rich green on top, much lighter (whitish) beneath. Under side shows in photograph. Stems pale green. Fruits deep rich crimson much richer than any shade in our samples. Colour is rather deeper at stem end. The small fruit at tip is still orange in colour. The fruits are from 5/8" to almost 1". They have a very slight "bloom", thin juice and many white seeds. The taste is not unpleasant rather insipid. 1 sec. F11 Superpan. From base of lowest leaf to tip of topmost 13 ½".

**U238.** *Anaphalis margaritacea (L.) B. & H., var. occidentalis Greene.* Detail of the Pearly Everlasting which is extremely abundant here. 1 sec. F11. Superpan. Stems and under surface of leaf whitish, upper surface of these specimens rich green. Heads white, the protruding anthers orange, turning brown. Basal bracts of involucre warm brown at base.

**U238.** Specimen at UA Herbarium Museum

	<p><b>Specimen Details</b></p> <p><b>Record Type:</b> specimen</p> <p><b>Family:</b> Asteraceae</p> <p><b>Scientific Name:</b> <i>Anaphalis margaritacea</i> (L.) Benth. &amp; Hook. f. var. <i>occidentalis</i> Greene</p> <p><b>Collector:</b> McCalla, William C.</p> <p><b>Collector Number:</b> 05121</p> <p><b>Date Collected:</b> 1938-08-06</p> <p><b>Locality:</b> North America: United States, Washington, Mount Rainier National Park, Mount Rainier</p> <p><b>Site Name:</b> Mount Rainier area: Site 6</p> <p><b>Site Description:</b> Bank on west side of Mount Rainier at a low altitude.</p> <p><b>Accession Number:</b> 68968</p>			
<b>Tuesday, 16 August 1938</b>	<b>At Mt. Rainier National Park, Longmire.</b>			
MM	Another fine morning. Had a pretty good night after I took an aspirin. My hand has a little more power today. Haven't undone the finger yet. We are in the Community House & Will is photographing some he brought down. Rainiera, Golden Rod, new Composite, Twisted stalk, Pearly, Everlasting. Changed presses, dried felts, Will had to write the notes up today. I couldn't manage the pen. Had a nap. Fixed the finger before going to bed – not so sore seems to be coming all right. Got letter from Helen S. & Edith.			
WCM	Nothing recorded.			
<b>Wednesday, 17 August 1938</b>	<b>At Mt. Rainier National Park, Longmire.</b>			
MM	Rained hard through the night but cleared off in the morning. Everything was dripping but nothing much fell after we got up. Got some fruit & vegetables, dried felts etc. After lunch we drove to Glacier Bridge parking place & walked up to the (132-215?) snow of the Nisqually glacier. It is estimated that it recedes an average of 70 ft. a year. It was interesting to see the depth of ice with water running down the face. Lots of dirt & gravel of course all over the top. The mountain, vine, maples are turning a beautiful red. The roads here will be a glorious sight in a couple of weeks. Californian man & wife camped next to us: L. F. Benn – very pleasant & hearty people. Have a trailer, Hemlock needles falling continuously a feature here. Went to the lecture.			
	<p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>1.00</td> <td>Longmire, Mt. Rainier</td> </tr> </table>	Food	1.00	Longmire, Mt. Rainier
Food	1.00	Longmire, Mt. Rainier		
WCM	Nothing recorded.			
<b>Thursday, 18 August 1938</b>	<b>Travel day. Longmire, Mt. Rainer National Park to Sunrise, Yakima Park (Mt. Rainer National Park)</b>			
MM	Leaving <b>Longmire</b> . Drove to gate thru beautiful forest. Dull the A.M. Glad to get packed up dry. En route to Yakima Park via Tacoma. Lovely Golden rod. The same Will photographed. Gorgeous maples. Past the mt. side where the fire was. Too bad to see the young trees burned over. Quite a stretch of mt. side black – still smouldering. <b>Elbe</b> . Alder. Abundance of these trees along here. Nisqually Canyon. Broad leaf Maple, Madrone. Park Demonstration forest. Ft. Lewis Military Res. Magnificent Firs in Park-			

	<p>like situation. Will photographed some of these 3 yrs. ago. <b>Puyallup</b>. A town of 100. We didn't go into Tacoma but turned east to this town. Had the car greased and got gas. 4106 miles. Had our lunch at a café. 50 cents ea. &amp; a meagre meal at that. Bought food to do about a week, we hope to stay at Yakima Park [Mt. Rainier National Park] if the weather is good. The drive from Puyallup was a beautiful one. 210 US highway is a splendid road &amp; the forests were grand. Drove through <b>Snoqualmie Natl. Forest</b>. From <b>Enumclaw</b> we climbed a little but mostly after entering the Park boundary. The highway runs 6 or 8 mls. through the Park before branching off to <b>Sunrise, Yakima Park</b>. We expected to drive through fog &amp; cloud, but the sky cleared &amp; we had good driving. Climbing up to Yakima, the road was clear all the way, but as we came higher the valley was filled with cloud &amp; fog. There were some effects. Not till we were right up did we see the mountain. It is grand from this side, mostly ice &amp; snow, but being so much higher &amp; seemingly nearer to it, the height is not so apparent. We have taken a cabin here, the camp ground was not very inviting, being in the open &amp; after we had been here a little while, fog came drifting in &amp; completely enveloped the camp ground. So we were glad to be completely housed. \$2.00 a night – water on tap, sink, light, lots of wood, shelves etc. Now as I write at 8:35, the fog is cleared away, stars are out &amp; the Mountain stands out majestically against the sky. It is cold &amp; Will drained the car. Had a comfortable fire and dried some felts. Had a good night. Mileage 4180.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>5.30</td> <td>Puyallup, Washington</td> </tr> <tr> <td>Lunch</td> <td>1.00</td> <td>Puyallup, Washington</td> </tr> <tr> <td>Refill for ?</td> <td>0.35</td> <td></td> </tr> <tr> <td>Cards</td> <td>0.05</td> <td></td> </tr> </table>	Food	5.30	Puyallup, Washington	Lunch	1.00	Puyallup, Washington	Refill for ?	0.35		Cards	0.05	
Food	5.30	Puyallup, Washington											
Lunch	1.00	Puyallup, Washington											
Refill for ?	0.35												
Cards	0.05												
WCM	Nothing recorded.												
<b>Friday, 19 August 1938</b>	<b>At Yakima Park (Mt. Rainier National Park), Sunrise.</b>												
MM	<p>A most glorious crystal clear day. The Mountain standing shining forth in all its glory. Walked to Frozen Lake, collected &amp; photographed, Leafy Aster, Lyall's Lupine, Golden Erigeron. Also collected a new Arnica &amp; a number of other new plants. Ate our lunch on top of a 7000' ridge, Knife Sharp, in full view of the Mountain &amp; further Cascade Mountains – a sublime outlook. White Bark Pine scrub trees also Alpine Fir. Mailed letters to the girls and Eva. Had a very fine day in every way. The Mountain was grand at the sunset time, rows of clouds across the base being beautifully lighted. A clear bright starry night, I went to the lecture on Wild Flowers – not so much!</p>												
WCM	<p>On trail to Frozen Lake and on short side trips from it.</p> <p><b>U239.</b> <i>Aster ledophyllus</i>. At base of dwarf Alpine Fir. The fringe of foliage at base of broad aster clump is <i>Polimonium</i> now out of bloom. Colours already recorded. 1/100 sec. F11 Superpan Press. Sunshine.</p> <p><b>U240.</b> <i>Lupinus Lyallii</i>. On pumice and rocks near Frozen Lake 6700 ft. 1/50 sec. F17. Superpan Press, sunshine. Foliage silvery green, flowers rich dark blue with touches of white. Rocks dark blue-gray.</p> <p><b>U241.</b> <i>Erigeron aureus</i>. On rock, 7000 ft., dark in colour with gray-blue lichen. Gray-green foliage, bracts woolly and dull purple brown shadings. Rays deep gold, disks golden brown. 1/100 sec. F14 Superpan Press. Bright sun, very windy.</p> <p><b>U241.</b> B/w photo at MN. V. 1.11.41.</p>												

	<p><b>U241.</b> Specimen at UA Herbarium Museum</p> <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>Specimen Details</b></p> <p><b>Record Type:</b> specimen</p> <hr/> <p><b>Family:</b> Asteraceae</p> <hr/> <p><b>Scientific Name:</b> <i>Erigeron aureus</i> Greene</p> <hr/> <p><b>Collector:</b> McCalla, William C.</p> <hr/> <p><b>Collector Number:</b> 05204</p> <hr/> <p><b>Date Collected:</b> 1938-08-19</p> <hr/> <p><b>Locality:</b> North America: United States, Washington, Mount Rainier National Park</p> <hr/> <p><b>Site Name:</b> Frozen Lake, Mount Rainier National Park: Site 16</p> <hr/> <p><b>Site Description:</b> On large rocks near Frozen Lake, east side of Mount Rainier.</p> <hr/> <p><b>Accession Number:</b> 68070</p> </div> <p>We climbed to the top of the almost knife-like ridge, found flat rocks to sit upon and then had our lunch. I photographed part of the magnificent circle on four films:</p> <p><b>U242.</b> Looking west along the left hand side of the ridge, which is partly clothed with dwarf fir and white barked pine; Frozen Lake near centre (the trail shows); patches of snow, and mountains beyond. 1/25 sec F12. Isos 2. Superpan, sunshine.</p> <p><b>U243.</b> I swung the camera to the left so that the mountain fills the upper part, and the picnic ground etc. show below. These two may be joined to show a panorama. (Use snow patch to make the join.) 1/25 sec. F 12.5 Isos 2. Superpan, sunshine.</p> <p><b>U244.</b> Looking east by north towards the series of peaks on the ridge, the trail to Dege Peak shows in the distance, below to left is a deep valley, with mountains beyond. 1/25 sec F12.5. Isos 2. Superpan, sunshine.</p> <p><b>U245.</b> Looking east by south with the buildings roadways etc. of Sunrise or Yakima Park down below. Dwarf, wind-beaten white barked pine in left corner of foreground. 1/25 sec F11. Isos 2. Superpan.</p>
<p><b>Saturday, 20 August 1938</b></p>	<p><b>At Yakima Park (Mt. Rainier National Park), Sunrise.</b></p>
<p>MM</p>	<p>Another beautiful day, clear and bright, a little warmer morning than yesterday. Walked to Berkeley Park, 3 miles along a fine trail as far as Frozen Lake &amp; there beyond into a lower elevation about 6000 ft. The banks were flower meadows with little rills with moss &amp; water seeping through, giving swamp conditions even on the banks. A larger stream flowed down through these meadows with their beautiful flowery slopes &amp; sparse groups of Alpine Fir. The deep blue Lupine was a magnificent sight as it grew in masses and was still so fresh. Mimulus, red &amp; yellow, Arnica, Valerian, Bostort, Senecio, Paint brushes, Bistort, and others all contributed their share of loveliness. All the varieties of Pedicularis except Rainierensi were on this walk. Little Elephant was beautiful in the swampy places. Just above Frozen Lake in a little depression Will found the <i>Smelowakia</i>, he had been wanting, in good shape. He took several photographs. He also got the little <i>Castilleja rupicola</i> he had been hoping for. It is a bright flame color, low clumps &amp; very lovely. The cerise one was also there. The little golden rod is very</p>

	<p>abundant along that trail. There is snow in patches &amp; I am sure some of it will be there when the new snow comes. There is a pumping plant at Berkeley park which probably supplies water to Frozen Lake which is the water reservoir.</p> <p>This today was one of the most beautiful flower gardens we have been through. “???” in places. Saw two marmots, one big fat fellow, a hoary. Yesterday at Frozen lake a hoary actually talked to me. He came out of his rocky hole &amp; squeaked away, not a bit averse to seeing us there apparently. The flowers along the main brook were particularly beautiful &amp; the sloping banks also. Will pressed all the plants after we got back. The cabins are full tonight.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Milk shake</td> <td>0.30</td> <td>Sunrise, Mt. Rainier</td> </tr> </table>	Milk shake	0.30	Sunrise, Mt. Rainier							
Milk shake	0.30	Sunrise, Mt. Rainier									
WCM	<p><b>U246</b> <i>Smelowskia ovalis</i> M.E. [?] Jones On pumice slope near Frozen Lake, a fine large plant (all from one root) (Pressed). 1/25 F12.5 Superpan, sunshine.</p> <p><b>U246.</b> Specimen at UA Herbarium Museum</p> <table border="1"> <thead> <tr> <th>Specimen Details</th> </tr> </thead> <tbody> <tr> <td><b>Record Type:</b> specimen</td> </tr> <tr> <td><b>Family:</b> Brassicaceae</td> </tr> <tr> <td><b>Scientific Name:</b> <i>Smelowskia ovalis</i> M. E. Jones var. <i>ovalis</i></td> </tr> <tr> <td><b>Collector:</b> McCalla, William C.</td> </tr> <tr> <td><b>Collector Number:</b> 05222</td> </tr> <tr> <td><b>Date Collected:</b> 1938-08-20</td> </tr> <tr> <td><b>Locality:</b> North America: United States, Washington, Mount Rainier National Park</td> </tr> <tr> <td><b>Site Name:</b> Mount Rainier National Park: Site 8</td> </tr> <tr> <td><b>Site Description:</b> Pumice slopes near Frozen Lake, at alt. of 6800 ft., east side of Mt. Rainier Natl. Park. Open pumice and rock slopes, at 6800 ft., above Frozen Lake on east side of Mt. Rainier.</td> </tr> </tbody> </table> <p><b>U247</b> Another plant of same on same slope, but this with a blue-gray rock behind shading the plant. 1/5 sec F11, Superpan.</p> <p><b>U248.</b> The same plant as above from a different position, now in bright sun; one or two of rocks warm yellowish brown. 1/10 sec F18. Superpan.</p> <p><b>U249.</b> Ditto with Superpan Press 1/50 sec F18. As flowers become older petals turn a dull purple. Leaves covered with stellate short hairs, quite gray-green. Stems hairy also, dull purplish, calyx something the same as stems but not so purplish. Unopened anthers creamy yellow, fading after pollen is shed, so that older fls. have a purplish centre (faint). Flowers fragrant.</p> <p><b>U249.</b> B/w photo at MN. V. 2.3.7.</p> <p><b>U250.</b> <i>Agoseris villosa</i>. On pumice near Frozen Lake. 1/25 sec F12.5 Superpan, Bright sun. Leaves hairy, rather dull blue-green softened by the white hairs. The veins much lighter. The edges of leaves near tip are rather bright red-brown, this no doubt where they are beginning to dry up. Stems and bracts hairy and somewhat purple brown.</p>	Specimen Details	<b>Record Type:</b> specimen	<b>Family:</b> Brassicaceae	<b>Scientific Name:</b> <i>Smelowskia ovalis</i> M. E. Jones var. <i>ovalis</i>	<b>Collector:</b> McCalla, William C.	<b>Collector Number:</b> 05222	<b>Date Collected:</b> 1938-08-20	<b>Locality:</b> North America: United States, Washington, Mount Rainier National Park	<b>Site Name:</b> Mount Rainier National Park: Site 8	<b>Site Description:</b> Pumice slopes near Frozen Lake, at alt. of 6800 ft., east side of Mt. Rainier Natl. Park. Open pumice and rock slopes, at 6800 ft., above Frozen Lake on east side of Mt. Rainier.
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	<p>Bracts have dark green tips, lighter yellow-green edges, with a broad red or purple brown patch in centre. Corolla bright gold, anthers and styles orange brown. <i>Polygonum Newberryi</i> growing with it has now stems old rose or pinker in tone and leaves dulled with brown of a purplish tone.</p> <p><b>U251.</b> A gully near the power house before Berkeley Park Shelter is reached. The little stream running over rocks is edged with luxuriant growth. White Spring Beauty in foreground among red mimulus and blue lupine, further down at junction of streams chiefly mimulus, senecio triangularis and a few lupine. On bank higher up from water are Valuriana, Lugustram, Int. Daisy, and silvery willow clump in middle distance. Alpine Fir in background. 1/25 sec. F13. Superpan.</p> <p><b>U252.</b> Another view of the flower bordered stream in Berkeley Park. 1/100 sec F16. Superpan Press. In addition to above-mentioned flowers are two yellow mimulus, marsh marigold (one plant in bloom) "Little Elephant", Blue gentian and some scattered Castiligm?, yellow Epilobium, green orchid, etc.</p> <p><b>U253.</b> <i>Pulsatilla occidentalis</i> in fruit, practically ripe. 1/100 sec F11. Superpan Press. Bright sunshine giving back lighting.</p> <p><b>U254.</b> Another group of fruiting stems of same on a more open slope with less vegetation crowding. 1/25 sec. F10. Superpan, back lighting again, with alpine fir furnishing the dark background. The foliage is bright rather yellow-green.</p>
<b>Sunday, 21 August 1938</b>	<b>At Yakima Park (Mt. Rainier National Park), Sunrise.</b>
MM	<p>A fine bright morning, the Mountain clear &amp; shining white. A fog has been rolling back and forth filling the opposite valley and obscuring the mountains over there. At 11:30 it has risen to obscure the sun but the Mt. stands out against a clear blue sky. Will has dried the felts &amp; changed the presses and is now photographing a pretty group of <i>Gentians</i> in the cabin. There are lots of people around today – weekenders. The fog cleared this afternoon &amp; the opposite peaks are clear again. Bright sun. Walked to Burroughs Mtn. 7000 ft. – 2.8 miles. There were many people on the trails today. The slope up to the mt. was fairly steep &amp; steady. The sun was bright but the wind cold. There were not a great many flowers on the rocky slopes nor on the broad pumice fields at the top. There were some lovely cloud effects &amp; Will photographed Mt. Rainier from Burroughs Mt. with well-lighted clouds across the face. He also took a picture looking down on Berkeley Park &amp; one showing the hundreds of cars parked in the picnic grounds – Sunday visitors in the Park. The Mountain is hidden with clouds tonight. Quiet reigns in the cabin area after the noise of last night.</p>
WCM	<p>In cabin.</p> <p><b>U255.</b> <i>Gentiana</i>. 6 sec. F16. Superpan. 5 ½ in. across opened flowers. Description already given.</p> <p><b>U255.</b> B/w photo at MN. V. 1.9.6.</p> <p><b>U256.</b> <i>Pedicularis groenlandica</i>. Three heads or racemes in fine condition. 40 to 45 % N.S. 6 sec F16 Superpan. Foliage, rather bright green, more or less edged or tipped with dull brown, stems purple brown. Calyx, purplish, the angles darker purple green. The "ears" are medium "Magenta". In two of the stems, particularly the "Magenta"</p>

becomes much lighter near the base. This is true also of the middle lobe of the under lip. Except for the rounded knob or bend in the upper lip, which is whitish, the lip is purple or a darker tone than the lower lip. The tip of the slender style and stigma project beyond the elongated "trunk". Beneath the upper lip the anthers are quite yellow but they play no part in the outward color scheme.

**U256.** B/w photo at MN. V. 1.11.10.

**U257.** Mt. Rainier with hundreds of cars parked in Picnic Grounds in valley below. Mirror Lake shows among the firs. 1/25 sec. F18. Isos 2, against sun, lens of course shaded. Superpan.

**U258.** Mt Rainier from Burroughs Mt. Again against the sun. Beautifully lighted clouds cover the lower slopes. 1/25 sec. F18 Isos 2. Superpan. The rocky ground on Burroughs Mt. (broad and completely flat) sustains a number of plants. I collected *Spaguea*, *Eriogonum* and *Agoseris*. Noticed also Lyall's Lupine, Drummond's Anemone (long past bloom), dwarf plants of *Solidago cifiosa*, *Erigeron aureus*, *Pentstemon Tolmeii*, *Polygonum Newberryi*.

**U258.** B/w photo at MN. V. 2.8.25.

**U259.** View from Burroughs Mt. looking down into Berkeley Park lying between ridges whose bottom is clothed with forest. Between these dark walls the fresh well-watered vegetation in the open bottom shows bright yellowish green. In the foreground is the rocky pumice slopes with the trail which we travelled yesterday. The Cascades beyond are hazy with lovely shades of blue. Clouds above are white with darker bases. 1/25 sec F16. Isos 2 Superpan. Bright sun behind and to left.

**U260.** *Pedicularis ornithorhynca*. Detail in cabin about 72% n.s. 6 sec. F16. Superpan, 4" across fls. Already described in detail, but the stems here are less hairy and rich dark purple, indeed the whole flower is unusually richly purple.

U260. B/w photo at MN. V. 1.11.6.



U260

*Pedicularis ornithorhynaea* Benth.

Duck-bill Lousewort X 1.12

Flowers rich purple.

**U260.** Lantern slide at PAA. PR2007.0257/131.



**Monday, 22  
August 1938**

**At Yakima Park (Mt. Rainier National Park), Sunrise.**

MM

Another beautiful day. Bright, fairly cool. Today we walked to Dege Peak. 7006 ft. A steep climb up this slope from the cabin. The high trail is not so bad some ups & downs. The Peak commands a panoramic view in every direction. Mt. Adams plainly seen off to the S.E. It was a wonderful place to spend a couple of hours, row after row of mountains were quite a sight, the best of that type of view I have ever seen. Will took a number of pictures from that point, also on the way down the trail, view showing the stunted nat.-like growth of the Alpine Fir, also Alaska Cedar & White Bark Pine. The color of the flowers in the foreground, the variety of green & the wonderful blues of the mountains made us again long for color film! Two new plants were added – a rock Senecio & another *Composite*. A fine group of *Rainiera* posed for a photograph also. This has been one of the first days of the summer unhurried, uninterrupted by others in the same spots etc., perfect weather, in view of the Mountain all day. New flowers & good photographic subjects. Two boys were on the Dege Peak who had hiked over from Paradise.

Tonight the clouds across the lower part of the Mountain were very beautiful, pink in the sunset. Quiet, almost cold evening. We went to the Lectures on the Forests. The same man spoke and it was rather worse than the flowers.

**Listed Expenses**

Food (bread)	0.45	Sunrise, Mt. Rainier
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WCM

Walked to Dege Peak, 7006 ft. A beautiful clear day pleasantly cool for walking. We spent over two hours on top enjoying the view on all sides.

	<p><b>U261.</b> Mt. Rainier from Dege Peak. 1/50 F11. Isos 2. Superpan. Repeated this a half hour later.</p> <p><b>U262.</b> Mt. Rainier from Dege Peak looking west. Ridge with trail to right, highway to Yakima Park and buildings in centre, part of Mt. Rainier to left. 1/50 F11. Isos 2. Superpan. The green of the valley is now somewhat browned, the firs show dark green.</p> <p><b>U263.</b> “A bed of living fir boughs” on a slope that rises steeply, I reclined to show size. 6700 ft. 1/25 sec. F12.5. Superpan.</p> <p><b>U264.</b> <i>Eriogonum pyrsoleaeifolium</i> Hook., var. <i>coryphaeum</i> T. &amp; G. A very fine plant (11 in. extreme width) on steep pumice slope with alpine fir in background. 6700'. Leaves yellow green above, woolly beneath. Stems light yellow green touched with brown beneath the heads. Flowers at first white with a pale green vein down centre of each segment. This, however, shows only on close inspection. Anthers dark red-brown. The flowers soon change to “Wine Red” or “Old Rose”. On each stem of this plant both kinds (white and rose) are found, the general effect being a lighter “Old Rose” or “Wine Red” than our samples. A plant of <i>Phlox diffusa</i>, long out of bloom, shows. 1/25 sec. F11. Superpan. 6700'.</p> <p><b>U264.</b> B/w photo at MN. V. 2.2.3.</p> <p><b>U265.</b> <i>Rainiera stricta</i>. A fine group in maximum bloom on steep hillside among scattered dwarf firs. 6800'. 1/200 sec. F8. Superpan <u>Press</u>. Bright sun, very windy. The flowers are bright yellow in the sunshine from left, and foliage also is yellow-green.</p> <p><b>U265.</b> B/w photo at MN. V. 1.13.3.</p> <p><b>U266.</b> <i>Rainiera stricta</i>. Another group nearby somewhat sheltered from wind. 1/100 sec. F9. Superpan <u>Press</u>. Associated plants – <i>lupine</i>, <i>Polemonium</i>, <i>Valeriana</i>, <i>Ligustrum</i>, <i>Phlox diffusa</i>, <i>Aster ledophyllus</i>, <i>Polygonum Newberryi</i>, <i>Epilobium augustifolium</i>, <i>Alpine Fir</i>.</p> <p><b>U267.</b> Alpine Fir, dwarfed by altitude and shorn by wind, many mat-like, some trying to make upright growth. Margaret standing to show size. Note contrast with the taller trees in valley below. 1/25 sec. F11. Isos 2, Superpan.</p> <p><b>U267.</b> B/w photo at MN. V. 2.16.</p> <p><b>U268.</b> Dwarfed trees of Alpine Fir, Alaska cedar, and white-barked pine on same slope about 6600'. I standing to show size. 1/25 sec. F11. Isos 2. Cedar quite yellow-green, pine much darker yellow-green, fir blue green. Yarrow, Alpine Aster and bright patches of <i>Polygonum Newberryi</i> among rocks in foreground. Mountains beautiful blue, bluest in distance. Valley floor light green, browning.</p> <p><b>U269.</b> Pumice slope above the trail to Dege Peak at about 6600 ft., gay with <i>Aster foliosa</i>, autumn coloured <i>Polygonum</i>, <i>anemone</i> heads, waving grasses warmly brown and other plants such as <i>Agoseris</i> which add to the whole without being individually conspicuous. “Islands” of alpine fir in background. 1/50 sec. F12. Superpan. Against sun</p>
<b>Tuesday, 23 August 1938</b>	<b>At Yakima Park (Mt. Rainier National Park), Sunrise.</b>
MM	Once again a beautiful clear bright day. After drying felts, changing presses, doing my part of the morning's work, we decided against a long walk with climbing, so started

	<p>across the lower slope just east of the cabin. Will photographed a group of trees, White Bark Pine the central figure surrounded with Alpine Fir. Again, a White Bark Pine against Mt. Rainier a striking setting. Here we found a well beaten path and followed it eastward along the edge of the steep bank above the deep valley below the glaciers. On this bank was what they call a silver or ghost forest, where fire swept 50 yrs. or so ago &amp; the burned trunks &amp; branches stand erect &amp; have been bleached white by the elements all these years. There is another such on the Road to Paradise which is said to be mostly Alaska Cedar. Here the trees are White Bark Pine and Fir. This path was made beautiful by the luxuriant growth of Asters, grand clusters and colors. We rested under a clump of trees on the pumice slope where grew, Asters, W. Anemone in great abundance in fruit &amp; many other little plants. Had our lunch there, collected a few plants &amp; photographed in cabin. Got letters from Edith, Louise &amp; George. Also got a Post. No clouds tonight to make a grand sunset.</p>
WCM	<p><b>U270.</b> A compact group of trees forming an "island" on the slope at Yakima Park. The tallest and broad headed tree in centre is a White Birch Pine 39 ft. high, 90 in. in air. Other pines and Alpine Fir make up the group. 1/50 sec. F9. Superpan. Bright sun behind.  <b>U270</b> B/w photo at MN. V. 2.1.</p> <p>No entries for <b>U271</b> through <b>U279</b>.</p> <p><b>U280.</b> A White Birch Pine in a striking setting, with the glaciers on Mount Rainier as a background. "Ghost" trees on either hand, dark ranks of Alpine Fir below. The Pine is 74" cir. B.H. More than half of the bark is gone from the lower trunk, no doubt burned when the adjoining trees were killed. 1/25 sec. F11. Isos 2. Bright sun from left. Superpan.  <b>U280.</b> B/w photo at MN. V. 1.9.</p> <p><b>U281.</b> <i>Aster ledophyllus Gray</i>. Six flowering stems from six different plants to show something of the variation in color and also in form. The leaves are deep green above, grey green beneath. Stems are rather deep green. Bracts, green and edged with purple brown or in some cases almost all purple. In all cases the newly opened flowers and those still in good condition have yellow discs, in the older flowers the yellow turns to brown with usually a little purple except in the case of those having rosy tinted rays. The centre stems belong to this latter class. A mixture of "Magenta" and a little "Cherry Red" will give the color. The two stems on either side of this centre one are much the same, a dilute mixture of "Mauve" and "Violet Dilute" might give it. The two shorter stems in front are intermediate in tone between those already described. "Violet Carmine" comes nearest. The short stem at the right is so pale that by comparison it looks almost white. 5 sec. F16. Superpan. 12" across.  <b>U281.</b> B/w photo at MN. V. 1.12.10.</p> <p><b>U281.</b> Specimen at UA Herbarium Museum</p>

## Specimen Details

**Record Type:** specimen; photograph

**Family:** Asteraceae

**Scientific Name:** *Aster ledophyllus* (A. Gray) A. Gray

**Collector:** McCalla, William C.

**Collector Number:** 05240

**Date Collected:** 1938-08-22

**Locality:** North America: United States, Washington, Mount Rainier National Park, Dege Peak

**Site Name:** Dege Peak, Mount Rainier National Park: Site 1

**Site Description:** Open pumice slope below Dege [Dege] Peak, east side of Mt. Rainier National Park [Mount Rainier National Park]

**Accession Number:** 68693

**U282.** *Pulsatilla occidentalis* Fruiting heads. Leaves soft yellow green, stems much the same or tinted a dullish brown. The flowers give the general effect of tawny grey. Much of the fruits were pulled off two stems to show the long pointed cones to which the fruits were attached. These cones are now a very light almost whitish green, the fruits a darker green. The filaments dried up at the base are "Mahogany Brown", and the anther sacks are a light creamy brown. We pulled off and counted the fruits on 5 stems. The numbers were 485, 292, 399, 460, 300 total 1936, giving an average of 387 to the head. 6 sec. F16. Superpan. 5 in. from tip of stripped cone to tip of opposite one. These narrow cones are hollow, the wall quite thin. The stem is not hollow, being filled with a soft white pitch. (See after **U290** for numbers of *Pulsatilla hirsutissimo*.)

**U283.** *Rainiera stricta*. The upper portions of a flower stem almost natural size. 11 Sec. F22. Superpan. The stem and involucres are a rather light blue green. The corollas of the lower flowers have browned for the most part, "Verona Brown" and "Velox Flesh" might give the shade. Usually each of these lower heads has one flower still fresh. Their colour is an odd shade of yellow. "Chrome Yellow" with a little "Straw" would give it. The column of stamens is in all cases warm brown, really yellow with 5 brown lines; the stigma that pushes up through these is yellow like the fresh corollas, remaining so even in the older flowers. The pappus which does not show much except in the buds is whitish with a tawny base. The few unopened flowers in the upper heads are dull yellow tipped with reddish brown.

**U284.** *Gentiana calycosa* Three flowers, natural size, wide open and so placed that the lens looks directly down into the flower. In spite of the small aperture the lower leaves will be somewhat out of focus. 15 Sec. F22. Superpan. Leaves are bright rich shining green, stems purplish. The description of the flower has already been given under U198. Since here, we see the inside of lobes and throat a few words might be added. The throat is whitish with blue lines and broader, dark, somewhat greenish lines, the lobes are blue "Violet Dilute" with just a little "Velox Dark Blue" added. The fringes between the lobes and the lines running down are of the same shade of blue. Spots on the lobes look to be white but when magnified show as dull & pale yellow green, each one bordered by a thin yellow line. Anthers are cream colored, there is one for each lobe of the corolla.

	<b>U285.</b> The same repeated as the first may have been jarred. 30 sec. F32. Superpan.						
<b>Wednesday, 24 August 1938</b>	<b>At Yakima Park (Mt. Rainier National Park), Sunrise.</b>						
MM	Started the day early by getting up at 4:30 to see the sun rise. We walked up the Dege Peak trail but didn't go all the way to the peak. The sunrise was not spectacular. There was no rosy light on the Mountain as I hoped there would be, but it was worth the trip anyway to see the light on the various crags & peaks & warm light on the Glaciers & the rocks of the mountain which were lighted into quite a bright color. After breakfast we walked to Frozen Lake and took photographs of Lyell's Lupine & Castilleja Rupicola. Changed the presses & dried felts after we came home. Today is about the warmest day we have had here. Getting partly packed up ready to leave in the morning.						
WCM	<p><b>U286.</b> <i>Castilleja Rupicola</i>. A plant on rocky hillside above Frozen Lake. Most of the foliage, occasionally clear green, is heavily tinted dull brown purple. In this plant the lower leaves sometimes show some green, the upper ones and especially the finely divided portion are purple brown. The uppermost bracts and the calyx top is flame scarlet, "Scarlet Vermillion" or a little deeper; some of the older flowers faded to somewhat orange scarlet. The tuber-like projecting corolla is light yellowish green on one lip and red on the other. The rocks are fairly dark, mostly brownish with dark and yellow, green patches of lichen. Leaves of the carex are yellowish green getting brown at the tips. A small plant of Lyell's Lupine shows. ½ sec. F11. Shaded by a big rock above. Superpan.</p> <p><b>U287.</b> Much the same. 1/5 Sec. F16. Superpan press. <b>U287.</b> B/w photo at MN. V. 2.6.38.</p> <p><b>U288.</b> <i>Lupinas Lyallii</i>. On pumice slope among rocks above Frozen Lake. 1/50 sec. F16. Sunshine. Superpan Press. The plant was about 12" in di. Leaves silvery green, both leaf and flower stems are purplish tinted, dulled and softened by fine white hairs. The corolla is a rich rather violet blue "Heliotrope" comes pretty close to it. In the centre of each standard is a patch of white with a few violet dots.</p>						
<b>Thursday, 25 August 1938</b>	<b>Travel day. Sunrise, Yakima Park (Mt. Rainier) to Portland, Oregon.</b>						
MM	<p>8:30. Leaving Yakima Park (Mt. Rainier National Park). Another beautiful morning, warm. The drive is very beautiful, the slopes truly are veritable flower gardens &amp; the trees magnificent. A good road. Rainiera is very abundant on these slopes – Asters &amp; fruit heads fld. anemone. Noble fir quite plentiful with lots of cones. Along the highway inside the Park, there are many little falls on the bank. In Snoqualmie Forest there are recreational places, cabins, camps – Silver Springs. <b>The Dalles</b> - recreational area. Burned over mt. slopes – red with fireweed – smoky through here. <b>Enumclaw</b> – Highway 99 – four lanes approaching <b>Tacoma</b>. Fort Lewis Army reservation. <b>Olympia</b> – 4 lanes from Tacoma. A good highway. Got gas near <b>Centralia</b> at 4320 miles 10 gal. Ate our lunch by the roadside south of <b>Chehalis</b>. <b>Mary's Corner</b>. 4420 mls. at <b>Portland</b>. Found the family [Dewey] at home at 2747 – N.E. 23 Ave.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>0.36</td> <td></td> </tr> <tr> <td>Flowers (for Deweys)</td> <td>0.25</td> <td></td> </tr> </table>	Food	0.36		Flowers (for Deweys)	0.25	
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Flowers (for Deweys)	0.25						

<p><i>Friday, Saturday, Sunday, 26, 27, 28 August 1938</i></p>	<p><b>Visiting with Dewey family in Portland, Oregon.</b></p>
<p>MM</p>	<p>During these days we visited with the Dewey family, had some delightful drives, shopped for food etc. On Friday noon we all had lunch down town at a very fine restaurant, Henry Thide's, a delicious meal amid pleasant surroundings, a large bouquet of gladioli centering the table. Have a folder telling all about the place. On Saturday afternoon we drove to <b>Silver Creek Falls</b> 50+ miles from Portland. It is a fine State Park with water falls at several levels. A lovely ravine which would be very fine earlier, we walked down both the north and south falls. At every place there was a cavern-like effect with a big overhang of rock over which the water fell. On Sunday we drove about Portland &amp; suburbs, saw some of the real "tones" estates on Palatine Hill. Had letters from Edith, Louise, Dency &amp; Ethel &amp; the children.</p>
<p><i>Monday, 29 August 1938</i></p>	<p><b>Travel day. Portland Oregon to Ephrata, Washington.</b></p>
<p>MM</p>	<p>Left <b>Portland</b> 8:50 after a most delightful visit. Rather dull this A.M. Maybe fog. Getting gas 4425 miles 11 gals. Full to the brim. Saw a truck load of fruit upside down, fruit scattered everywhere. Don't know if driver was hurt. <b>Beacon Rock</b> – Salmon River. Tunnels-8. Saw Mt. Hood across the river &amp; beyond Hood River. 8 tunnels. <b>Lyle</b> - ferry. <b>Maryhill</b> – ferry to <b>Biggs Ore</b>. On 97 going N. Hairpin &amp; switchback climb up through the bare hills. Good road. Up through smoke &amp; haze looms a snow cap peak. Mt. Adams, I think. <b>Goldendale</b>. Trees again on the hills – meeting trucks with big Yellow Pine logs. Summit Satus Pass 3149' – Simcoe Mts. Lunched under Yellow Pine trees in an Indian Territory picnic ground – crossing an Indian Reservation. Bare hills and sage brush again. Getting out of the bare dry hills into a broad irrigated valley. <b>Toppenish</b> – 2774 pop. In Yakima Valley. Saw a wrecked car by the highway. Warmed up this afternoon. <b>Yakima</b> – 2200 pop. Have been passing fruit stands galore grand peaches – cheap. Wish I could take some home. Fine shaded streets in Yakima. 30 cents an apple box – 50 cents for best. Shelf road above quite a gorge part way. Follow the Yakima River. A high rocky wall to our right most of the way. Really through a narrow valley. 4650 mls. got gas 10 gals at <b>Ellensburg</b>. Turned East on 7 State Highway, a good road among sage brush hills. Long straight stretches. Petrified forests. Crossing the Columbia R. at <b>Vantage Ferry</b>. Climb up around high Basaltic rock banks with the queer ? formations, rough rocky desert country. <b>Quincey</b> – a small town. Desert – some bare poor looking farms. Even sage brush is dried up – nothing green. Stopped at <b>Ephrata</b> for night in cabin like a house – 3 rooms, cupboards, toilet &amp; shower. \$1.75. "Auto Rest Camp".</p> <p>[Summary of the day follows].</p> <p>Drove 300 + miles. Average of 40 mls. [per hour] or a little better. We drove from Portland across the Columbia River to Vancouver Wash. &amp; then travelled on 430 the Evergreen Highway along the Columbia river. It is a fine road much less crooked than the Columbia Highway on the Oregon side. The high hills on the latter side explain the nature of the road, "up, down &amp; all around". It is perhaps more scenic, but the one we came down over was made easier on the driver. There was fog which hindered the visibility, but I could see the high hills &amp; rocks &amp; after the fog cleared got a good look in several at Mt. Hood. We passed Beacon Rock a high rocky tower which, Eva says, Edith climbed last summer. There are several ferries along there crossing to the Oregon side also The "Bridge of the Gods" – a toll bridge – went through 8 tunnels all together.</p>

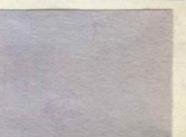
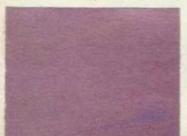
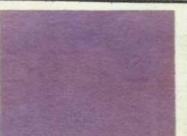
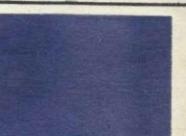
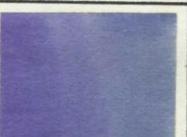
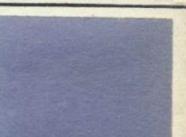
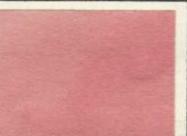
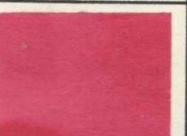
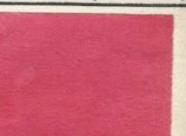
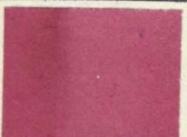
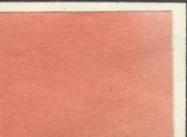
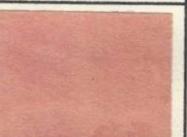
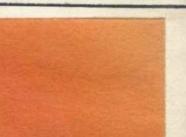
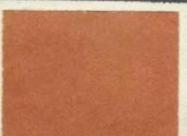
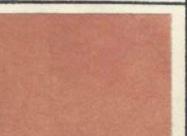
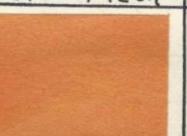
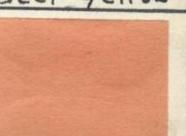
	<p>After <b>Lyle</b> some miles east of Salmon River, the type of country changed &amp; we were in a dry, desert-like area until we passed <b>Goldendale</b> on the 97 Highway going north when we got into trees again as we climbed up over the Sunrise mt. pass. On this road out of smoke &amp; haze loomed the snow-capped cone of Mt. Adams, I think it will be a wonderful effect. Drove through the Yakima Valley, I was disappointed not to see a real good orchard along the road. There were lots of fruit stands. The Petrified forest was a disappointment, we walked up a trail where there were about 8 stumps of petrified trees in sunken holes covered with heavy grating. There were some nice agates in the exhibit. (Rest of day in notes.)</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>1.21</td> <td>Ephrata, Washington</td> </tr> <tr> <td>Auto Rest Camp</td> <td>1.75</td> <td>Ephrata, Washington</td> </tr> </table>	Food	1.21	Ephrata, Washington	Auto Rest Camp	1.75	Ephrata, Washington
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Auto Rest Camp	1.75	Ephrata, Washington					
<p><b>Tuesday, 30 August 1938</b></p>	<p><b>Travel day. Ephrata, Washington to Sandpoint, Idaho.</b></p>						
<p>MM</p>	<p>Leaving here at 9:00 after a good night. Likely later to be a warm day. Rough desert country. Far horizon. <b>Soap Lake</b> – driving up the Grand Coulee past Soap Lake, Lenore L., Blue L. where we stayed 2 yrs. ago in June. The flat topped rocky formations &amp; walls still as odd as before. The road has been finished and is a good hard surface road. Are stopped now along Blue Lake while Will investigates some plant – maybe a ?, <b>Mentzelia</b>. <b>Park Lake</b> – Dry Falls State Park. Stopped for a look. Same old man, but we didn't wait for a spiel. Other cars there. En route to <b>Grand Coulee Dam</b>. Masses of sunflowers. At the Dam – a big difference since last year. Gas at <b>Davenport</b> – 4840 – 10 gals. Bare road, some wheat farms. <b>Spokane</b> – had to cross the city. 195 Highway through Newport to Sandpoint. Pine trees coming in. Some mixed forests, larch, pine etc. Diamond Lake very placid looking. <b>Newport, Idaho State</b>. A good deal of larch with pine &amp; A. Fir. 4954 mls. Staying in cabins at <b>Sand Point</b>. \$1.25. Very noisy.</p> <p><b>Listed Expenses</b></p> <table border="1"> <tr> <td>Food</td> <td>0.59</td> <td>Sandpoint, Idaho</td> </tr> <tr> <td>Cabin</td> <td>1.25</td> <td>Sandpoint, Idaho</td> </tr> </table>	Food	0.59	Sandpoint, Idaho	Cabin	1.25	Sandpoint, Idaho
Food	0.59	Sandpoint, Idaho					
Cabin	1.25	Sandpoint, Idaho					
<p><b>Wednesday, 31 August 1938</b></p>	<p><b>Travel day. Sandpoint, Idaho to near Sinclair Canyon, British Columbia</b></p>						
<p>MM</p>	<p>Leaving here – 7:40. Bright warm. Good road to <b>Bonner's Ferry</b> on Kootenai R. Poor gravel for a few miles then hard surface again to the border. <b>Eastgate</b>. Gas at 5019. 23.9 miles to Can. gal. from Portland. <b>Kingsgate</b> stopping at the Customs. No trouble at all. Pavement for 21 miles. Putting on surface a short way then blotter surface or just oiled gravel for 4 mls. Then dusty gravel <math>\frac{3}{4}</math> ml. then oil a short way, then dusty gravel again – then hard again to <b>Cranbrook</b> – a very pleasant surprise to find the road so good. <b>Kimberley</b> paved to here. Terrible road with construction &amp; roughness 9 mls. – 2 mls. paved to Highway. From <b>Wasa</b> there was a detour just about unspeakably bad till we hit the completed pavement. 6 miles of it then unfinished construction. Trees absolutely white with dust. Very bad for at least 40 mls. Then pavement about 12 mls. South of Fairmont for 6 <math>\frac{1}{2}</math> mls. – then rough gravel again. From Fairmont on it was a better gravel road &amp; rough in spots. North of Windermere a few miles there was hard surface again but another detour even here, not so bad as some. Partly good to the Park gate. Stopped for gas just outside gate. 5177 miles 7 gals. Kootenay Nat. Park. Fee \$2. Fine entrance buildings here. Sinclair Pass 4950'. Beautiful driving through the forests in the cool air. The flowers are limited to Asters. There are some fine Mtn. Ash berries. Staying at the Rocky Mountain Cabin Camp - 22 miles from Sinclair Canyon. Ray's Service Station.</p>						

	<b>Listed Expenses</b>											
	Food	0.42										
	Park fee	2.00										
		Cranbrook, BC.										
		Kootenay National Park										
<b>Thursday, 1 September 1938</b>	<b>Travel day. Nr. Sinclair Canyon to Calgary via Peyto Lake.</b>											
MM	<p>Leaving at 9:30 after a good night. Morning warm &amp; bright. It was a pleasant drive to the Junction where we turned to go up the new Jasper Highway. 5265 at start of Jasper Highway. 5000'. 5271- 5300' alt. 5273 – 5650'. Bow L. 6300 '. 5283 – 6100 ft. Summit 6700+. Walked to the Lookout over Peyto L. ¾ hr. Magnificent view. Beautiful water egg blue. Immense Glaciers. 3, Bow, Crowfoot &amp; Peyto. Very majestic mountains along this road. Several little lakes. Road rough &amp; washboard in places. Very unpleasant and bumpy for many miles between Louise turn &amp; Johnson Canyon. Gas at Banff. 5366 mls. 5 gals. The road to Calgary is hard all the way. Such a treat! The best drive we have ever had from Banff. Some rain just to make us feel right! Not for long. Getting gas at the Imperial Stn. on the Banff road corner. 5448 mls. <b>4852 miles for the trip.</b> The girls met us at the door. Glad to see us as we were glad to be HOME!</p>											
WCM	<p><b>U289.</b> Peyto Lake.  <b>U290.</b> Peyto Glacier.  At Calgary, we counted stamens and pistils of two flowers of <i>Pulsatilla hirsutissima</i>.</p> <table border="1"> <thead> <tr> <th>Stamens</th> <th>Pistils</th> </tr> </thead> <tbody> <tr> <td>221</td> <td>187</td> </tr> <tr> <td><u>193</u></td> <td><u>172</u></td> </tr> <tr> <td>414</td> <td>359</td> </tr> <tr> <td>207 average</td> <td>179 ½ average</td> </tr> </tbody> </table>		Stamens	Pistils	221	187	<u>193</u>	<u>172</u>	414	359	207 average	179 ½ average
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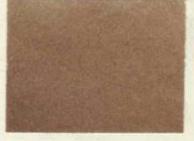
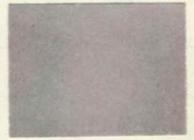
## APPENDIX 1

These three pages of colour chips were at the end of WCM's Photographic Record Journal for 1938. They would have been used later when he painted selected lantern slides of the wildflowers he had photographed. Reference in the journal to the chips was always in the form of "colour".

Page 1. Colour chip

			
Japanica Scar.	Geranium Pink	Arbutus Pink	Jackane. Red
			
Wild Rose Pink	Royal Crimson	Wine Red	Old Rose
			
Magenta	Violet Carmine	Cherry Red	Wisteria Violet
			
Mauve	Amethyst	Heliotrope	Violet
			
Cardinal Red	Ruby Red	velox Violet	Violet (dilute)
			
Scarlet Ver.	Brick Red	velox Scarlet	vel. Brill. Red
			
Crimson Lake	Flesh	velox Flesh	Deep Yellow
			
Bismark Br.	Red Earth	Maize	Orange Yellow

## Page 2. Colour chip

			
Cadmium yellow	Golden yellow	Straw	Yellow Lake
			
Chrome yellow	Brilliant yellow	Canary yellow	Light Tan
			
Raw Umber	Verona Br.	Deep Tan	Yellow Earth
			
Ecrú	Roddway Br.	Mahogany Br.	Burnt Umber
			
Van Dyke Br.	Sepia	Seal Brown	Velox Stone
			
Payne's Gray	Stone Gray	Brown Rocks	Olive Green
			
Maple Green	Chrome Green	G.Y. + Ant. Blue	Moss Gr. Light
			
S & P Green	Moss Gr. Deep	Sage Green	Hookers Gr. Dark

Page 3. Colour chip.

			
Grass Green	Hooker's Gr. Light	Ch. Y. + Lark Blue	Distant Tree Gr.
			
Robin's Egg Bl.	Sea Green	Silvery Green	Pine Needle Gr.
			
Misty Distance	Cerulean Blue	Forget-me-not Bl.	Sky Blue
			
Larkspur Blue	Marine Blue	Antwerp Blue	Navy Blue
			
Dark Blue	VELOX Dark Bl		

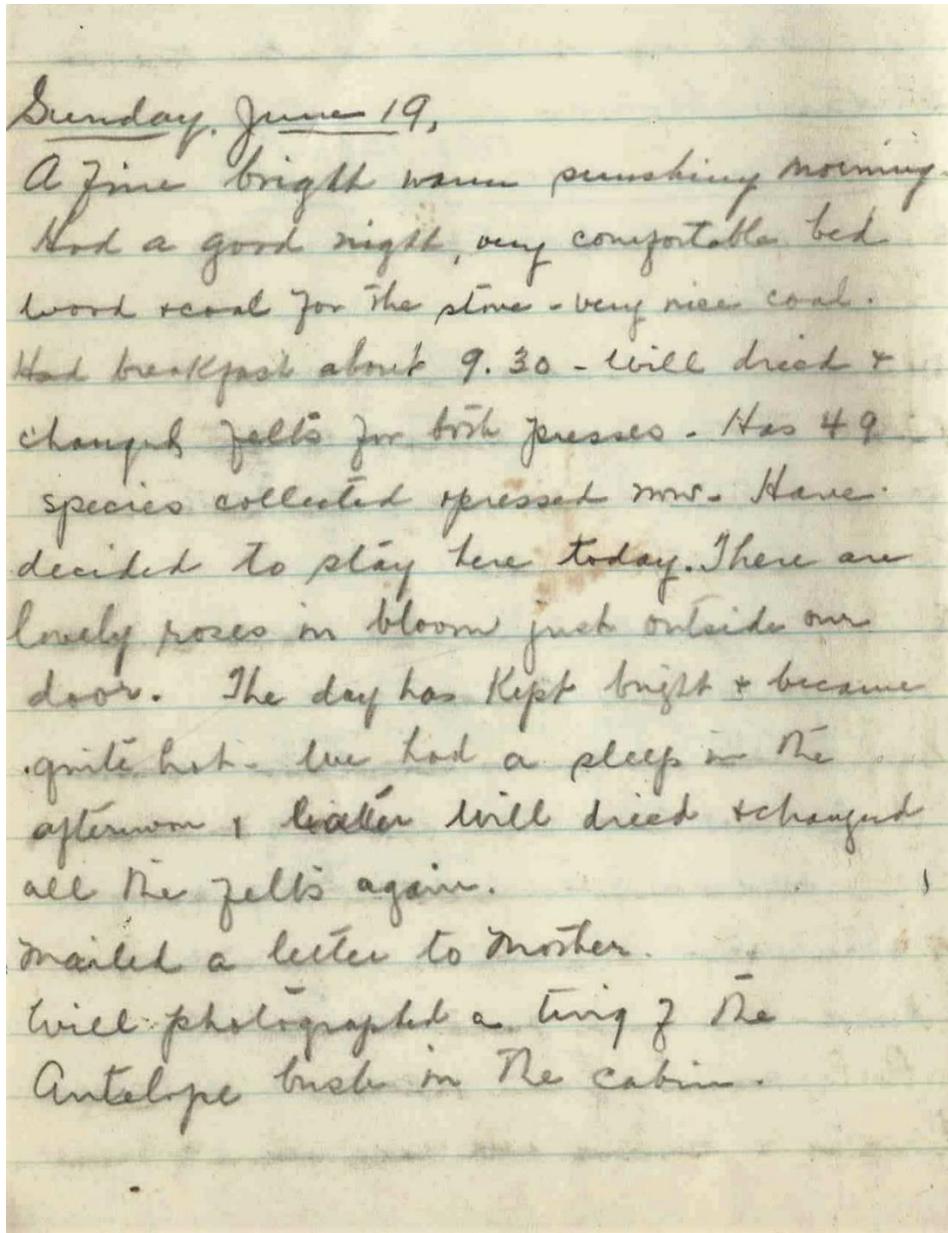
## APPENDIX 2

Examples of

a) Margaret McCalla Journal and

b) William McCalla Photographic Record Journal for June 19, 1038.

a)



Sunday, June 19,  
A fine bright warm sunshiny morning.  
Had a good night, very comfortable bed.  
Wood scold for the stove - very nice coal.  
Had breakfast about 9.30 - Will diet &  
changed felts for both presses - Has 49  
species collected & pressed now. Have  
decided to stay here today. There are  
lovely roses in bloom just outside our  
door. The day has kept bright & became  
quite hot. We had a sleep in the  
afternoon & later Will diet & changed  
all the felts again.  
mailed a letter to mother.  
Will photographed a twig of the  
Antelope bush in the cabin.

b)

June 19<sup>th</sup>.

- U 27. *Purshia tridentata* (Pursh) DC.  
 Antelope bush twig in beautiful bloom,  
 brought from rocky slope near the  
 summit of Monida Pass, almost  $\frac{1}{2}$  nat size.  
 5 sec. F 16. Super pan, grey back ground.
- U 28. Ditto against black back ground.  
 Stems rather warm brown, leaves deep  
 green above, paler green beneath. Anthers  
 deep golden yellow, petals, delicate soon  
 falling away, a pale creamy yellow,  
 probably "canary yellow" with a little "chrome"  
 added. The inner face of the spreading  
 calyx lobes a very pale green, ovary deeper  
 green, filaments pale yellow. Fragrant,  
 not unlike Chokeberry, but not so heavy.
- U 29. Small red flowered *Minuartia* described  
 under No 4792. The crest of the  
 Snow National Monument.  
 3 Too sec. F 11 Super pan press. Bright sun.  
 very windy, waited a long time to make exposure.
- U. 30. Ditto.  
 10  $\frac{1}{25}$ . F 13. Super pan. Bright sun