



Hunt Institute for Botanical Documentation
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Web site: www.huntbotanical.org

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About the Institute

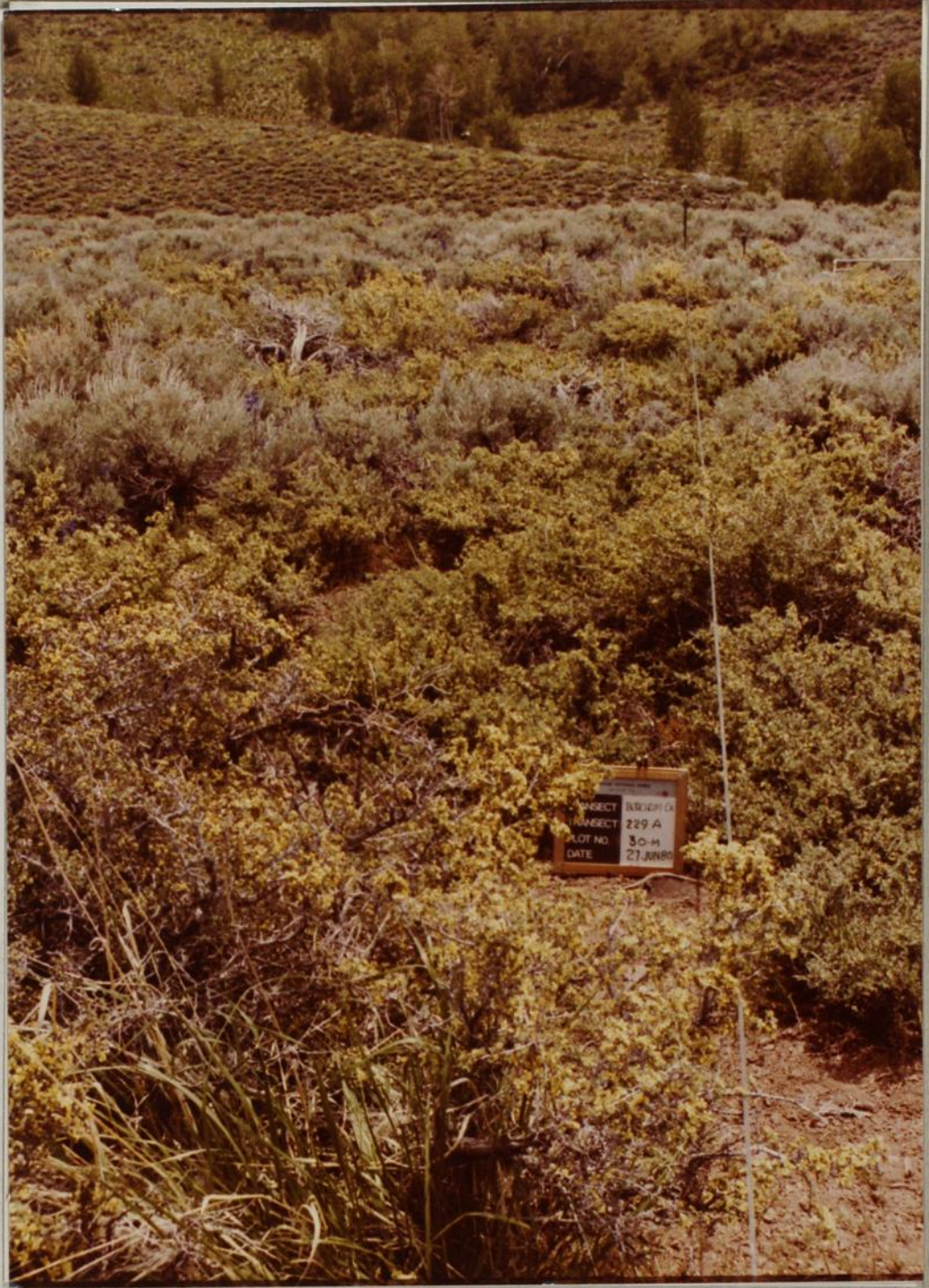
The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

Toiyala K.F. Strand Plots - 1980 -

FF36





REQUEST FOR QUOTATIONS
(THIS IS NOT AN ORDER)

Page _____ of _____

1 REQUEST NO Q-19R4-80-19	2 DATE ISSUED 4/17/80	3 REQUISITION/PURCHASE REQUEST NO	4 CERTIFIED FOR NATIONAL DEFENSE UNDER BDSA REG 2 AND/OR DMS REG 1 RATING
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5 ISSUED BY Contracting Officer U.S. Forest Service 8226 Fed. Bldg., 125 So. State Salt Lake City, Utah 84138	6 DELIVER BY (Date) Estimated start work date June 1, 1980
7 DELIVERY <input checked="" type="checkbox"/> FOB DESTINATION <input type="checkbox"/> OTHER (See Schedule)	

FOR INFORMATION CALL (Name and tel. no.) (No collect calls)

8 TO NAME AND ADDRESS INCLUDING ZIP CODE <i>I carried out this contract in the summer of 1980.</i>	9 DESTINATION (Consignee and address including ZIP code) District Ranger Toiyabe National Forest Bridgeport, California 93517
---	--

2:00 PM

10 PLEASE FURNISH QUOTATIONS TO THE ISSUING OFFICE ON OR BEFORE ~~5/20/80~~ 5/20/80 SUPPLIES ARE OF DOMESTIC ORIGIN UNLESS local time at place of bid opening (Date)

OTHERWISE INDICATED BY QUOTER THIS IS A REQUEST FOR INFORMATION, AND QUOTATIONS FURNISHED ARE NOT OFFERS. IF YOU ARE UNABLE TO QUOTE, PLEASE SO INDICATE ON THIS FORM AND RETURN IT. THIS REQUEST DOES NOT COMMIT THE GOVERNMENT TO PAY ANY COSTS INCURRED IN THE PREPARATION OR THE SUBMISSION OF THIS QUOTATION, OR TO PROCURE OR CONTRACT FOR SUPPLIES OR SERVICES.

SCHEDULE

11 ITEM NO	12 SUPPLIES/SERVICES	13 QUANTITY	14 UNIT	15 UNIT PRICE	16 AMOUNT
1	Please furnish a price and technical proposal for Trend Studies on the Bridgeport Ranger District, Toiyabe National Forest, as per the attached specifications.				
<i>20 July</i>	Alex Brown - 246B	1	ea	\$ _____	
<i>17 June</i>	Stock Drive - 228A	1	ea	\$ _____	
<i>22 Aug</i>	Long Canyon Bench - 228B	1	ea	\$ _____	
<i>(20 Aug)</i>	Piute Pass - 228C	1	ea	\$ _____	
<i>26 June</i>	Burcham Creek - 229A	1	ea	\$ _____	
<i>13 Aug</i>	Swauger - 231A	1	ea	\$ _____	
<i>16 Aug</i>	Lobdell Lake - 231B	1	ea	\$ _____	
<i>25 June</i>	Cottonwood Meadows - 231C	1	ea	\$ _____	
<i>15 Aug</i>	Huntoon Canyon - 208A	1	ea	\$ _____	
<i>14 July</i>	Long Valley - 208B	1	ea	\$ _____	
<i>23 June</i>	Jones Pasture - 203A	1	ea	\$ _____	

17. PRICES QUOTED INCLUDE APPLICABLE FEDERAL, STATE, AND LOCAL TAXES.
DISCOUNT FOR PROMPT PAYMENT _____ % 10 CALENDAR DAYS, _____ % 20 CALENDAR DAYS, _____ % 30 CALENDAR DAYS, _____ % _____ CALENDAR DAYS

NOTE: Reverse must also be completed by the quoter.

18 NAME AND ADDRESS OF QUOTER (Street, city, county, State, including ZIP Code)	19 SIGNATURE OF PERSON AUTHORIZED TO SIGN QUOTATION	20 DATE OF QUOTATION
	21 SIGNER'S NAME AND TITLE (Type or print)	22 TELEPHONE NO. (Include area code)

NAME OF OFFEROR OR CONTRACTOR

ITEM NO.	SUPPLIES / SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
21 July	Lower Stage Road - 203B	1	ea	\$ _____	
18 July	Fryingpan Flat - 203C	1	ea	\$ _____	
28 June	Wedertz Flat - 203D	1	ea	\$ _____	
20 June	Green Ranch - 203E	1	ea	\$ _____	
16 July	Burcham Pond				
	TOTAL BID PRICE				\$ _____
	<p>Basis For Award</p> <p>Award will be based on an all or none quote.</p> <p>Evaluation will be considered in two parts - 50% Technical Qualifications 50% Price Proposal</p> <p>Proposals submitted in response to this Quotation shall consist of <u>two separate parts</u> entitled: <u>Service Proposal</u> and <u>Price Proposal</u>. Each part should be complete in itself so that evaluation of the Service Proposal may be made strictly on its own merit without the price proposal being made known. The Service Proposal shall be evaluated as per evaluation criteria.</p> <p>Your Price Proposal should be broken down accordingly: Transportation Salaries Administrative Overhead Report Preparation</p> <p>Technical Qualifications background, experience and ability should be broken down to show at least the following:</p> <p>Number of persons and length of time that each will work on the project What is each persons qualifying experience What type of supervision each will receive How many supervisors or work leaders What are the qualifying experiences of each How much time will they spend on the job Who will be preparing the report (forms, pictures, & herbarium) plus their qualifications</p> <p>40% of the Qualification evaluation will be placed on the qualifications and experience of the field personnel and supervisors and 10% of the Qualification evaluation will be placed on the qualifications and experience of the bidder.</p> <p><u>CONTRACT TIME</u> It is anticipated that work will begin about June 1, 1980 and all work must be completed within 180 calendar days after notice to proceed is received by successful bidder, unless extended in writing by the Government.</p>				

Specifications

Division 100 - General Specifications

110 - Scope of Services

The Bridgeport District of the Toiyabe National Forest will establish 16 trend studies using frequency, cover and photographic methods. As well, a voucher plant collection will be made for each macroplot. The contractor will establish the transects on sites chosen by the District. He will prepare and submit required maps, forms, and photographs as specified in the Technical Specifications (Division 200). He will also submit a voucher plant collection for each macroplot as specified in Section 214.2.

All work will be accomplished to standards prescribed in the following sections.

120 - Location and Description

The transects are located on the Bridgeport District and their approximate location is shown on the attached maps. Access and approximate dates of reading are as follows:

<u>MACROPLOT NAME & INFORM NUMBER</u>	<u>ACCESS</u>	<u>APPROXIMATE DATE OF MEASUREMENT</u>
1. Alex Brown - 246B	Helicopter	7/10
2. Stock Drive - 228A	4x2 Pickup	6/7
3. Long Canyon Bench - 228B	Helicopter	7/28
4. Piute Pass - 228C	Helicopter	7/30
5. Burcham Creek - 229A	4x2 Pickup - 1/4 mi. walk	7/6
6. Burcham Pond - 229B	Helicopter	7/4
7. Swauger - 231A	4x2 Pickup - 1/2 mi. walk	8/5
8. Lobdell Lake - 231B	4x2 Pickup - 1/4 mi. walk	8/1

9. Cottonwood Mdws. - 231C	4x2 Pickup - 1/4 mi. walk	6/9
10. Huntoon Canyon - 208A	Helicopter	8/3
11. Long Valley - 208B	Helicopter	7/8
12. Jones Pasture - 203A	4x2 Pickup	6/3
13. Lower Stage Road - 203B	4x2 Pickup	6/5
14. Fryingpan Flat - 203C	Helicopter	7/12
15. Wedertz Flat - 203D	Helicopter	6/13
16. Green Ranch - 203E	4x2 Pickup	6/11

For those macroplots not accessible by pickup, the Forest Service will provide transportation (Section 151).

The reference posts will be placed by the Forest Service and the location shown the contractor on an aerial photograph and 15' U.S.G.S. topographic map.

130 - Contracting Officer's Representative

The Contracting Officer will designate a representative hereafter referred to as the Contracting Officer's Representative (COR) who will provide on-the-ground administration of the contract. Before work begins, the Contracting Officer will advise the Contractor of the name and address of the COR.

140 - Contractor Obligations

Contractor shall furnish all transportation, labor, supervision, supplies, materials, tools, equipment, and incidentals necessary to complete the work, except those to be furnished by the Forest Service as stated in Section 150.

The Contractor shall demonstrate that he has the technical skills to complete the job, without detailed supervision of Forest Service personnel.

141 - Education

Contractor (or employee) performing the work shall possess either a college degree in range management or a related discipline.

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

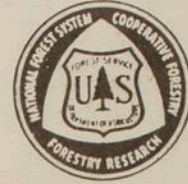
Wasatch National Forest
8226 Federal Building, 125 South State
Salt Lake City, Utah 84138

REPLY TO: 6320 Contracting

June 2, 1980

SUBJECT: Range Trend Studies
Bridgeport Ranger District
Toiyabe National Forest

TO: Mr. Jack L. Reveal
3843 Ingraham Street, Apt.F-309
San Diego, California 92109



CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Dear Mr. Reveal:

Your offer to do the Range Trend Studies on the Bridgeport Ranger District, Toiyabe National Forest has been accepted and award made to you under Contract Number 43-9360-0-1051. A copy of the excuted contract is enclosed for your files.

I have appointed Carol Gunn as my Contracting Officer's Representative to administer your contract. A copy of this designation is enclosed.

Ms. Gunn will contact you concerning the pre-work conference and the starting work date.

Should you need assistance or additional information, contact Ms. Gunn (714) 932-7070.

Sincerely,

A handwritten signature in cursive script, reading "James H. Brannan". The signature is written in dark ink and is positioned above the typed name and title.

JAMES H. BRANNAN
Contracting Officer

Enclosures

UNITED STATES DEPARTMENT OF AGRICULTURE
PURCHASE ORDER

THIS NUMBER MUST
APPEAR ON ALL
INVOICES, PACKAGES AND
PAPERS RELATING TO
THIS ORDER

PAGE NUMBER	CONTRACT NUMBER	ORDER DATE	ORDER NUMBER	SUB
1 OF 1	OM	060380	43-9360-0-1051	

CHECK ONE	TO: (Seller)	SHIP TO: (Consignee and Destination)
<input checked="" type="checkbox"/> Purchase Order (See Reverse)	Jack L. Reveal 3843 Ingraham Street Apartment F-309 San Diego, California 92109	District Ranger Toiyabe National Forest Bridgeport, California 93517
<input type="checkbox"/> Delivery Order		

LINE ITEM	ACT CODE	DESCRIPTION	QUANTITY	UNIT ISSUE	UNIT PRICE	AMOUNT
01		Write Trend Studies on the Bridgeport Ranger District, Toiyabe National Forest in accordance with Q-19R4-80-19 and your proposal dated 4/30/80.	1	job	6,190.00	6,190.00

SELLER'S ORIGINAL

FOB POINT	DISCOUNT TERMS	TOTAL	
Destination	Net	6,190.00	
TIME FOR DELIVERY	SHIP VIA		
Beg. June 2, 1980	N/A		

BILLING INSTRUCTIONS:

DO NOT SHIP ORDER TO THIS ADDRESS
(Ship to Consignee Address Above)

Furnish invoice with our ORDER NUMBER to:
U.S. DEPARTMENT OF AGRICULTURE
National Finance Center
P.O. Box 60075
New Orleans, Louisiana 70160

FAILURE TO SHOW OUR PURCHASE ORDER NUMBER ON INVOICE WILL DELAY PAYMENT

FREIGHT CHARGE OVER \$25 REQUIRES BILL OF LADING

ISSUING OFFICE NAME AND ADDRESS	ORDERED BY (Name and Title)
Contracting Officer U.S. Forest Service 8226 Fed. Bldg., 125 So. State St. Salt Lake City, UT 84138	JAMES H. BRANNAN Contracting Officer
	PHONE (Area Code and Number)
	(801) 524-5070 FTS 588-5070
	AUTHORIZED SIGNATURE
	<i>James H. Brannan</i>

43-9360-0-1051

Bridgeport Trend Studies

Jack Reveal
3843 Ingraham St., Apt. F309
San Diego, CA 92109

**CONTRACT CHANGE ORDER
OR
DATE SHEET COVERING AMENDMENTS**
(REF: FSPR 46-16.870-39)

CHANGE ORDER NO.

one

ORIGINAL CONTRACT AMOUNT

INSTRUCTIONS:

List below (or an attached sheet if necessary) each proposed change, identified by item number, location of station, etc., giving reasons for the changes. Attach copy of Supplemental agreement covering any contract amendment.

PROPOSED CHANGES	Amount of Increase (+) or Decrease (-)		
<p><u>Division 200</u></p> <p>217 - Report</p> <p>Each macroplot report will be submitted in duplicate. The extra copy of each report will be for the S.O. Records.</p> <p>The Bridgeport District of the Toiyabe National Forest will pay the cost of the duplicate reports, as part of the contract for the Bridgeport Trend Studies.</p>	<p>+ 322.00</p>		
<p>NET CHANGES THIS ORDER →</p>	<p>\$ 322.</p>		
<p>CONTRACT AMOUNT PRIOR TO THIS CHANGE →</p>	<p>\$ 6190</p>		
<p>NEW CONTRACT TOTAL →</p>	<p>\$ 6512</p>		
<p>CONTRACT TIME PRIOR TO THIS ORDER IN DAYS</p> <p style="text-align: center;">0</p>	<p>DAYS INCREASED THIS ORDER</p> <p style="text-align: center;">+2</p>	<p>DAYS DECREASED THIS ORDER</p> <p style="text-align: center;">0</p>	<p>NEW TOTAL CONTRACT TIME IN DAYS</p>

If and when approved by the contracting officer, I hereby accept this order as to work to be performed, prices to be paid and contract time as shown above.

CONTRACTOR		DATE
<i>Jack C. Reveal</i>		<i>14 July 1980</i>
CONTRACTOR'S REPRESENTATIVE	TITLE	DATE

SUBMITTED	DATE	SIGNATURE	TITLE
	<i>7/14/80</i>	<i>Carol Gunn</i>	CONTRACTING OFFICER'S REPRESENTATIVE
RECOMMENDED	DATE	SIGNATURE	TITLE
APPROVED	DATE	SIGNATURE	TITLE
	<i>7/21/80</i>	<i>James P. Brannon</i>	CONTRACTING OFFICER

FUNDS AVAIL. SYMBOL
 YES
 NO

CONTRACTOR'S COPY

6300-39 (9/69)

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
Wasatch National Forest
8226 Federal Building, 125 South State
Salt Lake City, Utah 84138

REPLY TO: 6320 Contracting

November 4, 1980

SUBJECT: Contract No. 43-9360-0-1051
Bridgeport Trend Studies
Toiyabe National Forest

TO: Jack Reveal
3843 Ingraham Street, Apt. F309
San Diego, California 92109



Final inspection has been made for Contract No. 43-9360-0-1051 for Bridgeport Trend Studies furnished by you to the Toiyabe National Forest. This is your notice of the acceptance of this contract.

Your payment voucher in the amount of \$6,512.00 has been approved and forwarded to the National Finance Center for payment.

We appreciate the fine efforts you made in supplying this service to the National Forest. Those who worked with you were impressed with your dependability and positive attitude towards your job. We will keep your name on our prospective bidder's list for future needs.

A handwritten signature in cursive script that reads "James H. Brannan".

JAMES H. BRANNAN
Contracting Officer

6983 Camino Pacheco
San Diego CA 92111
28 December 1980
31 " 1980.

Dear Barry:

Thanks for you Christmas card and the good words from far-away Idaho. I hope you can sell your macroplots to the region, as they won't know what they're losing if they too quickly turn it down. I don't know if I can help with ideas, but I'll try.

First of all, one must realize that the plots aren't complicated once a routine is established and carefully followed from one plot to the next. Each plot requires the reading and listing of some 1500 bits of information (more or less, depending on the number of species and a few other things) and this could be troublesome if one doesn't adopt a 1,2,3, etc. system and then follows it to the letter. Without a set procedure, you can miss things or flounder around. It took me awhile to learn this, believe me. Here, briefly, is the routine I used:

1. Before going to the plot, get together in a manilla envelope all the forms, maps, air photos you'll need. Put the headings on the forms as much as you can in advance. Then check thru tools, pin supply, etc. to be sure you have everything.

2. Once at the plot, size it up, noting veg. type, common species, abundant species, uncommon ones, new ones, and so on. Then collect the specimens for the voucher collection. At Bridgeport this would be 20 to 40 specimens. Put each specimen in a pressing paper with its own number and a name and write this name and number on the plant list form. Give unknowns a pseudonym. Be careful to collect specimens with taxonomic characters (when they are to be had) and of appropriate size for 5" x 8" cards. Don't skimp. You should get 80% of the plants on the plot in this first collection. I believe specimens should go into pressing paper and a small light-weight press made up of about a dozen sheets of corrugate and blotter material. Bagged specimens turn out poorly, are subject to mix-up, and tend to get neglected. Back in camp, I transfer the specimens from the field press to a regular plant press.

3. Now list the species on the Frequency Data Sheet (Ex. 3); make sure names and numbers jibe with what is on the Species list - Exh. 6. Because most plots will require nesting of 2 or sometimes three plot sizes, the problem arises at once as to what frame to use for species which threaten to over-run or under-run the frequency limits. I found that the best answer to the problem is to bracket the species in question -- for example, tally the species in both the .2 m and the .5 m, or the .1 m and the .2 m frames. After a transect or two, you can drop the least appropriate or keep doing both. It takes little extra work.

4. Lay out the 30-m base line, using the spring to get a tight tape. Read compass bearing, etc. as asked for in Exh. 2.

5. Drive pins at 0, 5, 9, 16, 27 and 30 meter points.

6. Take the baseline photos and the general photos asked for and appropriate to show locality, type, etc. Enter data of forms.

7. Lay out the 6-m belt, using a turn-buckle to center the 0-mark over the 5-m mark on the base line. Drive pins at the 10 and 20-m points.

8. Read shrub intercept, entering data on record form - Exh. 7. Read tape heights and enter.

9. Select and photograph at least two plots along the belt; enter data as required on Exh. 2 and Exh. 8.

10. Read each of the 20 plots along the belt. At each plot, first tally ground cover (Exh. 4); then read-out species frequency and enter data on Exh. 3. At the end, check to see if frequencies are within the 20/80 percent limits.

If new species are encountered (-and they will be, most likely) give the plant a name and number and enter on both the frequency data sheet and the Species list. Collect the plant specimen in a bag; or sometimes I put a red XX by the name to tell me to collect the plant before leaving the plot.

11. Take a last check for complete data, then reel-up the 20-m tape and move to the 10-meter belt.

12. Lay-out and read plot lines at the 10, 17, and 28 meter transects, as described in paragraphs 7 thru 11. After finishing the 28-meter belt, examine the frequency data to see if an additional transect is needed.

13. Roll-up the tapes and collect all tools and equipment, checking to make sure you don't leave something behind.

14. Make a rough drawing of the vicinity map, taking compass reading or other measurements as appropriate. Locate on topo. map.

15. With a field stereoscope, locate and pin-prick the plot.

16. Write-up condition and trend along with other notes that might be helpful to understand the state of things.

17. On the way out, select a place and make one or two "approach" photos. Show location on topo and/or sketch map.

18. Back in camp, transfer specimens from field press to a regular plant press. Change blotters from previous collections as needed. Put all field notes and maps in a mainlla folder and file in a safe place until "office" work begins.

I do the office phase in about the following manner:

1. Get the film processed at once by the best company you can find. Store the prints and negs for safe keeping.

2. Identify the plant specimens next. (You can't do much until you have correct plant names of everything.) I begin by setting up a genus-folder-~~type~~ container for the specimens from each macroplot. You might sometimes need 2 to hold the things from one plot. Then sort-out the specimens by plots, each into its folder. Now the work begins. Go through each folder, checking the ones you know and setting aside the ones that will need looking at more closely or outright identification. As this is done, check-off names and numbers on the Plant List for each plot. When you've gone thru all the folders, bring all the unknowns together and sort-out into families or genera; bring like-species together to simplify the task of identification. From this point on it is just a matter of working until you have names you're satisfied with. As you do each specimen, be sure you enter the correct name on the Plant List for the right macroplot. If you don't do that, keep a checklist of everything by plots. Refile in folders.

3. Next - mount all the specimens, doing one plot at a time. This will give you a second chance to jibe specimen name*with the name and number on the Plant List. This seems necessary to avoid mix-ups. File away the mounted specimens by plots. (*and #)

4. Now the task of making clean copies of all the field forms. I begin with the macroplot sheet (Exh. 2), then the Line Intercept, then ground cover, then the Field Frequency. The frequency data is the hardest to do because you have to jibe names from the plant lists with the name and number you used in the field. Of course, the names on the frequency data sheet must agree with names (and numbers) on the Plant List and also with the number and name on the voucher specimens. Recopy the Plant list either before or after you do the Field Frequency. (I save "apparent trend" write-up for later.) Last of all, do the Field Photo Record (Exh.8). Refile clean copies with the field sheets and maps.

5. The photographs come next. Sort-out for each plot the photos and their negatives. Place the negs in a labeled envelope and file in the plot folder. Then mount the photos on the photo record forms (Exh.5) and enter the required information, using the Field Photo record as a source. Recheck and file with the plot material.

6. Next, I get set up to do the sketch maps and related work on the air photos and topo sheets. I can do the sketch maps much better if I do them together as a project rather than one at a time as a part of step 4.

7. At this point, I go back and write the apparent trend

Hi Carol - with you'd check the drawing on the ground cover work sheet. I believe the spacing for the ground cover marks are wrong on the 0.5 m limb of the 1m frame. Should be 1.5 m and 1 m, not 1 m, 1. So this right?

statement for each of the plots. I find I can do this better if I do this as a separate task rather than sort of piecemeal as I come to it.

8. Last of all, the material for each plot is filed in a two-pocket folder--forms on the left, photos, negatives and air-photos on the right. These, with the packets of plant specimens, complete the work.

I found that I can do a better job---or as good a job--if I work alone, following a pretty exact procedure from beginning to end. It's harder alone, for you walk yourself to death laying out the transects and carrying things around. It might be easier to train one person (I almost said one man--oops!) than a two-person team. If one is to use a two-person team then I believe one person should do the lead work and the second person should be the note-keeper, pin-driver. The work might suffer if you mix things up.

I can do a plot easily in two working days, including camp work, plant pressing, some botany, etc. What takes the time, for me, anyway, is the non-field tasks--at least twice as long as the field work. Doing the taxonomy, mounting the voucher specimens, sorting this and that; checking this name, that number; getting the photographs together and finally annotated and mounted; drawing acceptable sketch maps, finishing the topos and air photos; then copying clean sets of all the forms, and finally getting it all together in a file folder and a packet of plant specimens-- It all simply takes a mess of time. To wrap it all up from beginning to end takes me from 5 to 7 man days per plot. A fast mover might do it in 4 or 5. In summary, I can say this: the macroplots aren't so complicated as they are painstaking and time-consuming. But isn't that always the price of quality?

I've mentioned this before--and I'd like to again-- I wish I could do a plot and then have someone else redo the same plot a day or so later to see how the two sets of data compare. That is a lot of foot-tracks over the same small piece of ground, but I'd sure like to know what the difference might be in intercept, ground cover, frequency, species list, etc.

Well, Barry, this turned out to be a little longer than I started out to write and it is now the 30th of December. Try to overlook the errors in spelling, typing and so forth. I'll send a copy of this to the people at Bridgeport. Again, let me say I hope you can convince the region that ordinary people can do the macroplots if they can qualify as good workers in the first place. Early-on range cons may not be able to handle the taxonomy, but if they can collect specimens, assign names and numbers to specimens they collect and accurately relate these to observed frequencies--all well and good, because some one else can later correctly identify the plants in question and plug the right names back into the write-up sheets. That's a great advantage to your system.

Hope you'll keep me informed from time to time as things move on.

Sincerely,
Jack.

REQUEST FOR QUOTATIONS
(THIS IS NOT AN ORDER)

1 REQUEST NO Q-19R4-80-19	2 DATE ISSUED 4/17/80	3 REQUISITION/PURCHASE REQUEST NO	4 CERTIFIED FOR NATIONAL DEFENSE UNDER BDSA REG 2 AND/OR DMS REG 1 RATING
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FOR INFORMATION CALL (Name and tel. no.) (No collect calls)		7 DELIVERY <input checked="" type="checkbox"/> FOB DESTINATION <input type="checkbox"/> OTHER (See Schedule)	

8 TO NAME AND ADDRESS INCLUDING ZIP CODE	9 DESTINATION (Consignee and address including ZIP code) District Ranger Toiyabe National Forest Bridgeport, California 93517
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Sent R.M-R/R -

2:00 PM

10 PLEASE FURNISH QUOTATIONS TO THE ISSUING OFFICE ON OR BEFORE ~~APRIL 20/80~~ 5/20/80 SUPPLIES ARE OF DOMESTIC ORIGIN UNLESS
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SCHEDULE

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1	Please furnish a price and technical proposal for Trend Studies on the Bridgeport Ranger District, Toiyabe National Forest, as per the attached specifications. Burchum Pond - 229B Alex Brown - 246B	1	ea	\$ 365.00	\$365.00
	Stock Drive - 228A	1	ea	<u>\$365.00</u>	365.00
	Long Canyon Bench - 228B	1	ea	<u>\$390.00</u>	390.00
	Piute Pass - 228C	1	ea	<u>\$365.00</u>	365.00
	Burcham Creek - 229A	1	ea	<u>\$365.00</u>	365.00
	Swauger - 231A	1	ea	<u>\$415.00</u>	415.00
	Lobdell Lake - 231B	1	ea	<u>\$415.00</u>	415.00
	Cottonwood Meadows - 231C	1	ea	<u>\$420.00</u>	420.00
	Huntoon Canyon - 208A	1	ea	<u>\$420.00</u>	420.00
	Long Valley - 208B	1	ea	<u>\$365.00</u>	365.00
	Jones Pasture - 203A	1	ea	<u>\$385.00</u>	385.00

17 PRICES QUOTED INCLUDE APPLICABLE FEDERAL, STATE, AND LOCAL TAXES

DISCOUNT FOR PROMPT PAYMENT _____ % 10 CALENDAR DAYS, _____ % 20 CALENDAR DAYS, _____ % 30 CALENDAR DAYS, _____ % _____ CALENDAR DAYS

NOTE: Reverse must also be completed by the quoter.

18 NAME AND ADDRESS OF QUOTER (Street, city, county, State, including ZIP Code) Jack L. Reveal 3843 Ingraham St. Apt F309 San Diego, CA 92109	19 SIGNATURE OF PERSON AUTHORIZED TO SIGN QUOTATION <i>Jack L. Reveal.</i>	20 DATE OF QUOTATION 30 April 1980
	21 SIGNER'S NAME AND TITLE (Type or print) Jack L. Reveal	22 TELEPHONE NO (Include area code) 714- 272-9105

open 20 May 1980

4-17.80

STANDARD FORM 36, JULY 1966
GENERAL SERVICES ADMINISTRATION
FED. PROC. REG. (41 CFR) 1-16.101

CONTINUATION SHEET

REF. NO. OF DOC. BEING CONT'D.

Q-19R4-80-19

PAGE 2 OF 2

NAME OF OFFEROR OR CONTRACTOR

Jack L. Reveal

ITEM NO.	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Lower Stage Road - 203B	1	ea	\$ 385.00	\$385.00
	Fryingpan Flat - 203C	1	ea	\$ 365.00	365.00
	Wedertz Flat - 203D	1	ea	\$ 365.00	365.00
	Green Ranch - 203E	1	ea	\$ 390.00	390.00
	TOTAL BID PRICE				\$ 6190.00
	Basis For Award				
	Award will be based on an all or none quote.				
	Evaluation will be considered in two parts - 50% Technical Qualifications 50% Price Proposal				
	Proposals submitted in response to this Quotation shall consist of <u>two separate parts</u> entitled: <u>Service Proposal</u> and <u>Price Proposal</u> . Each part should be complete in itself so that evaluation of the Service Proposal may be made strictly on its own merit without the price proposal being made known. The Service Proposal shall be evaluated as per evaluation criteria.				
	Your Price Proposal should be broken down accordingly: Transportation Salaries Administrative Overhead Report Preparation				
	Technical Qualifications background, experience and ability should be broken down to show at least the following: Number of persons and length of time that each will work on the project What is each person's qualifying experience What type of supervision each will receive How many supervisors or work leaders What are the qualifying experiences of each How much time will they spend on the job Who will be preparing the report (forms, pictures, & herbarium) plus their qualifications				
	40% of the Qualification evaluation will be placed on the qualifications and experience of the field personnel and supervisors and 10% of the Qualification evaluation will be placed on the qualifications and experience of the bidder.				
	<u>CONTRACT TIME</u> It is anticipated that work will begin about June 1, 1980 and all work must be completed within 180 calendar days after notice to proceed is received by successful bidder, unless extended in writing by the Government.				

Jack L. Reveal
3843 Ingraham St. Apt. F309
San Diego CA 92109

Reference-
Q-19R4-80-19
4/17/80

SERVICE PROPOSAL
(Technical Qualifications)

The bidder himself, if awarded the contract, will work full time on the project as its supervisor. With the help of one assistant, he will do all the required field work; he alone will prepare the forms, photographs, maps and herbarium specimens. He may seek professional assistance to varify plant names.

The bidders' qualifications as they relate to this project are as follows:

Education: BS in forestry, Utah State University, 1937, plus one quarter post graduate work in range management, 1938.

Experience: 1938 - 1939. Range Conservationist with the U.S. Grazing Service and the University of Nevada in Elko County and Reno, on range surveys and data compilation.

1948 - 1967 District Ranger, USFS, on two Sierra Nevada ranger districts where range management was an important function. Range work included the installation of permanent transects for condition and trend, and a working knowledge of plants.

1967 - 1974 Resource Staff Officer, Cleveland National Forest, including responsibility for range management. This assignment also included installation of vegetation transects.

1975 - November 1979 Assistant to the Curator of the herbarium, San Diego Museum of Natural History, as a full-time volunteer; except for periods away on other work, which included the following:

* May 1979 to September 1979 Under a service contract issued by the Toiyabe National Forest, installed 19 Macroplots (trend studies) on the Bridgeport ranger district. This work, which also included a purchase order for a plant collection, was almost identical to the work covered by the current RFQ. The work was done to the satisfication of the Forest Service.*

November 1979 to present Am presently employed as a Consulting Botanist, Regional Environmental Consultants (RECON), doing vegetation surveys and botanical reports in the San Diego area.

Jack L. Reveal

Jack L. Reveal 30 April 1980

Jack L. Reveal
3843 Ingraham St. Apt. F-309
San Diego, California 92109

Reference:
Q-19R4-80-19

PRICE PROPOSAL

Transportation	\$ 775.00
Salaries.....	2660.00
Administrative Overhead.....	00
Per diem.....	765.00
Report Preparation	
Salaries.....	1570.00
Photographs, film, etc.....	320.00
Miscel. supplies.....	100.00
	<hr/>
Total Bid	‡ 6190.00

Jack L. Reveal

Jack L. Reveal 30 April 1980

EXPERIENCE QUESTIONNAIRE

Submitted to CONTRACTING OFFICE, Wasatch National Forest

By Jack L. Reveal

Principal Office 3843 Ingraham St. Apt F309, San Diego CA 92109

A Corporation
 A Co-partnership
 An Individual

1. How many years has your organization been in business as a general contractor under your present business name?

2. How many years experience in _____ ^{this type} construction work has your organization had:
(a) As a general Contractor (b) as a Sub-Contractor

3. List below the projects your organization has completed within the last five years.

Contract Amt.	Type of Project	Date Completed	Name of Owner
	SEE SERVICE PROPOSAL		INCLUDED WITH
	THIS BID.		

4. List names and addresses of persons to be contacted for information on projects listed in item 3.

Name of Owner	Name and Address of Person to be Contacted

5. Have you ever failed to complete any work awarded to you? _____ If so, where and why:



\$ 28.62 per roll

1 roll = 2 plots = 28 photos

= 14.31 per plot

= .89.44 / photo.

photos 14.31 x 16 = \$ 228.96

Emoxin = 256 prints @ .03 = 7.68
 \$ 236.64

Mounting: 5 hrs

Other

3

8 hrs @ 80 = 316.64

256
 1280

228.96
 1280
 80.00
 \$ 321.76

Actual Costs field 1980 -

	Cost/plot
Food + Lodging $190 + 392 = 582 \div 16$ plots	\$ 36.40
Car rental + fuel $197 + 918 = 1115 \div 16$	\$ 69.70
Photos \$ 442 $\div 16$	27.60
Other $41 \div 16 = 2.60$	<u>2.60</u>
Σ Direct costs of field -	\$ 136.30
Paid per plot	407.90

32
69/1
9

Macroplots - 1980

Summary of field Expenses

No. / No. plots	FOOD	Lodging	Gasoline	Car Rental	Photos	Other
6/16-30 (15 da) June - (7)	69.17	152.64	66.34	274.14	171.72	} 41.12
7/12-23 (13 da) July (4)	38.09	101.76	61.70	277.68	110.28	
Aug 8-23 (15) Aug (5)	82.97	137.80	69.12	366.86	160.22	
(16)	190.23 8.7%	392.20 18%	197.16 9%	918.67 42.1%	442.22 20.2%	41.12
Total field Expenses			2181.60	Total Cont. vel.		6512.00

33.5% of contract to field expenses.

$$\frac{6512 - 2181}{6512} = \frac{\$4331}{6512} \rightarrow \text{per plot} = \frac{\$4331}{16} = \$271.00$$

$$\frac{2181}{16} = 136.62 / \text{plot}$$

→ (\$271.00) to pay for office work, etc, incl delivery of work to Bridgeport.

Aug 8 Sat 23am,

Costs - Budget part Proj. to 9.1.80

food (cabe)	\$ 190.23
Lodging	392.20
Gasoline	197.16
VW Rental	918.67
Photo & film	442.22
Office, & other	\$ 41.12
	<u>2181.60</u>

Mileage - June 1242 mi
July 1028 ..

1231

3501 - 140 gal gas. = 25.0 mpgal.

6190	6190 ⁰⁰
321.76	<u>321 76</u>
<u>6517 6</u>	\$ 6511.76
	<u>2181 60</u>
	4330.16

918.67
<u>197.16</u>
.83

Costs - Budgetary Dept. to 2-1-50

120.00

30.00

10.00

20.00

40.00

June 14

31

25
9

12 July

23 "

Food (cost)
Lodging
Transportation
Miscellaneous
Office, etc.

16
11
16

43 days

100.00
100.00

100.00

100.00 = 100.00

100.00
100.00
100.00
100.00
100.00

100.00
100.00
100.00

Budget Report Project 1980

Phase I - 16 June - 30 June

Expenses

Motel Rent -	152.64	6.16, 18, 19, 22, 24, 25, 26, 27, 29
film processing	171.72	
VW bug rental	355.28	
meals (8) "Trails"	40.65	
meals (5) "Sportsman"	24.44	
Coffee	.85	
Cold drinks	.80	
Meal - Pine Pine	4.03	
Gasoline	8 gal 10.50	
"	23.6 lit. (6.2) 8.24	
"	7.0 9.80	
"	24.1 Lit (6.5) 8.99	
"	5.8 7.90	
"	6.4 9.00	
"	3.8 5.00	

43.7 gallons / 1242 ml = 28.4 ml/gal.

Groceries	4.08
	<u>813.92</u>
Credits - battery purchase	- 81.14
	<u>732.78</u>

Field work complete on

(1) Stock Dr.	390.00
(2) Green R.	390.00
(3) Low. Stage Rd	385.00
(4) Jones Pushover	385.00
(5) Cotton wood	420.00
(6) Branchham Cr.	415.00
(7) Weclerty fl.	365.00

plus extra prints: 140.77
 Expected income: 2890.77

(7 x 20.11)

Est. add. costs: 20 + 730 = 750

$$\begin{aligned} & \sqrt{2140} \div 7 = 305.71 \\ & 2140 \div 7 = 305.71 \end{aligned}$$

As Planned

	Approx DATE	Plot Name No	(H) Hel. or (PU) Car	Miles Car	Remarks	
④ done ✓	3 June	Jones Posture 203A	PU	25 mi	} camp at Sweetwater ← x BP	
③ done ✓	5 "	Low. Stage Rd. 203B	PU	44		
① done ✓	7 "	Stack Drive 228A	PU	30	} camp at Wheeler	
⑤	9 "	Cotton. Meadow 231C	PU + 1/4	38		
② done ✓	11 "	Green Ranch 203E	PU	55	Bridgeport motel	
⑦ done	13 "	Wedert 2 Flat 203D	Hel.	-	" " "	
	4 July	Burcham Pond 229B	Hel. PU + 1/4 mi	-	← ⊗ Bridgeport motel } camp at Wheeler	
⑥ done	6 "	Burcham Cr. 229A	PU - 1/4 mi	30	} Camp at Bridgeport	
	8 "	Long Vall. 208B	Hel	-		
	10 "	Alex Brown 246B	Hel	-		
	12 "	Freyling Ran F. 203C	Hel	-	Bridgeport motel	
					← Bridgeport motel	
Opinion	28 July	Long Cuy Bar 228B	Hel	-	} camp at Bridgeport	
	30 July	Picute Pass - 228C	Hel	-		or Wheeler
	1 Aug	Lobdell L. 231B	PU 1/4 mi	50	} " " "	
	3 Aug	Huntton Cuy 208A	Hel	-		Bridgeport motel
	5 Aug	Swager Fl. 231A	PU + 1/2 mi	45		Camp - Wheeler. ← Motel.

2 ord in field per plot

Camp sites June 10
Motel June 4
July
Camp 6
Motel 4
July (gas) 4 - motel
6 Camp.
Camps - 22
Motel = 12 miles

Dales King - 12.86/day
12¢/mi

315 + 200
500 m
1700
2200 mi

Phase II
July 12 - 22 (23)

3.78 L/gal
\$ 28.62/roll
for film

Expenses - 12 July - 22 July

VW Rental ± 12712 - 13740 = 1028 mi x .12¢ = 123.36
12 days @ 12.86 = 154.32
\$ 277.68

Meals . 89	gasoline	office	+ 50
2.99	8.65 - 6.6 gal	10.60	\$ 327 / trip
5.85 -	5.70 - 3.5 gal		
4.99	7.98 - 5.7		
2.36	10.00 - 7.2		
1.57	11.50 - 8.1		
3.79	6.32 - 5.0		
5.00	50.15	36.1 @ 26 m/gal	
4.10			
2.26			
.94			
35.24			

motel - 101.76

film cost/roll
for one print = \$ 28.62
2 prints = \$ 57.24
Cost per plot = \$ 14.31
for one print

Σ = VW - 277.68 -
food - 35.24 -
gas 50.15 -
motel 101.76 -
Phone local 1.00
+ film 465.83
114.48
580.31

Plots done:

Long Valley 365.00
Rabbit Run Pond 365.00
Frying Pan 365.00
Alex Brown 365.00

1460⁰⁰ income + 80⁰⁰ prints 1540
- 465⁰⁰ 580.31
995⁰⁰ ÷ 4 = \$ 248.54
879.69 + 80⁰⁰ = \$ 959.69

(over)

	field Expenses		Est Income
phase I	750	7 plots	2891 incl. Ex. prints =
phase II	580.31	4 plots	1460 + 80 = 1540 =
Total	→ \$ 1330 ÷ 11 = 120 =/plot		\$ 4431 = \$ 3101

Phase III

5 plots

- 465 - Sewage
- 420 - Labeled L. (P.U.)
- 365 - fuel
- 365 - Harvest
- 365 - L.C. bench.

1565 +

1930 + 100 = 2030 =

field Expenses 120 =/plot = \$ 1920 =

Income 6190 = 6511

+ 321 = 4590

6511 =

Aug

food.	gas	Lodging	film
2.51	(24.14) ⁶³ 9.03	\$ 137.80	2.61
5.45	- 6.5 9.05		1.58
5.67	- 7.0 9.80		146.81
4.24	6.6. 8.73-		<u>3.22</u>
10.70	- 8.5 11.51		160.22
4.24	- 7.1 10.00		
5.67	3.6 5.00		
6.09	<u>4.2</u> <u>6.00</u>		
2.60	49.8 69.12		
12.08			
4.21			
5.58			
2.36			
8.57			
2.00			
82.97			

#16
VW = \$
366.86

1231 mi

Summary

	food	Lodging	gas (gal.)	gas (#)	Bus miles \$	Photos	Office, other
June 69 ^m	152.64	44.7	66.34	274.14	171.72		
July 38.09	101.76	45.5	61.70	277.68	110.28	41.12	
Aug 82.97	137.80	49.8	69.12	366.86	160.22		
	190.23	392.20	140.0 140.0	197.16	918.67	442.22	41.12
			(1408)				

\$ 1838.26

Expenses - Bridgeport

June

food	lodging	gasoline	
1.90	152.64	3.8	5.00
6.09		(24.) - 6.3	8.99
10.30		5.8	7.90
3.75	film process.	8.0	10.50
.85	171.72	6.4	9.00
2.40		(18.8-) 5.0	6.85
2.36	Car Rent	7.0	9.80
8.74	\$ 274.14	(23.6) <u>6.2</u>	<u>8.24</u>
9.69		44.7	66.34
5.40			
2.05			
4.10			
2.36			
5.70			
<u>3.43</u>			
69.17			

(1242 miles)

July

food	lodging	gasoline	other Expense
5.00	\$ 101.76		office suppl. 10.66
1.57			Tech. pers. 7.88
2.36			Amor Bros. <u>22.58</u>
3.79	film \$ 110.28		41.12
.90			
4.10			
2.49		8.1 - 11.50	
4.99		7.22 10.00	
5.85		9.4 12.20	
2.76		(13.34) 3.5 5.00	6.5 - 9.05
.94		6.6 8.65	7 - 9.80
<u>3.35</u>		(21.44) 5.7 7.98	7.1
38.09		5.0 6.32	4.2 - 6.00
		<u>45.5</u> 61.70	6.6 - 8.73
	Bus. 277.68		
	1028 ML.		

FREQUENCY TREND STUDY
MACROPLOT SHEET

Macroplot Name Wedertz Flat No. 203-d Date(s) 28-29 June 19 1980
 Allotment _____ Tape Ht. 0 m. 55 cm 30 m. 48 cm
 Legal _____ Photo No. 05-77-76-77 Mag. Bearing 162° Az 0 m. to 30 m.
 Frame Size(s) 1.0 m²; 0.5 m²; 0.2 m² Weather windy, warm, partly cloudy to cloudy on the 29th.

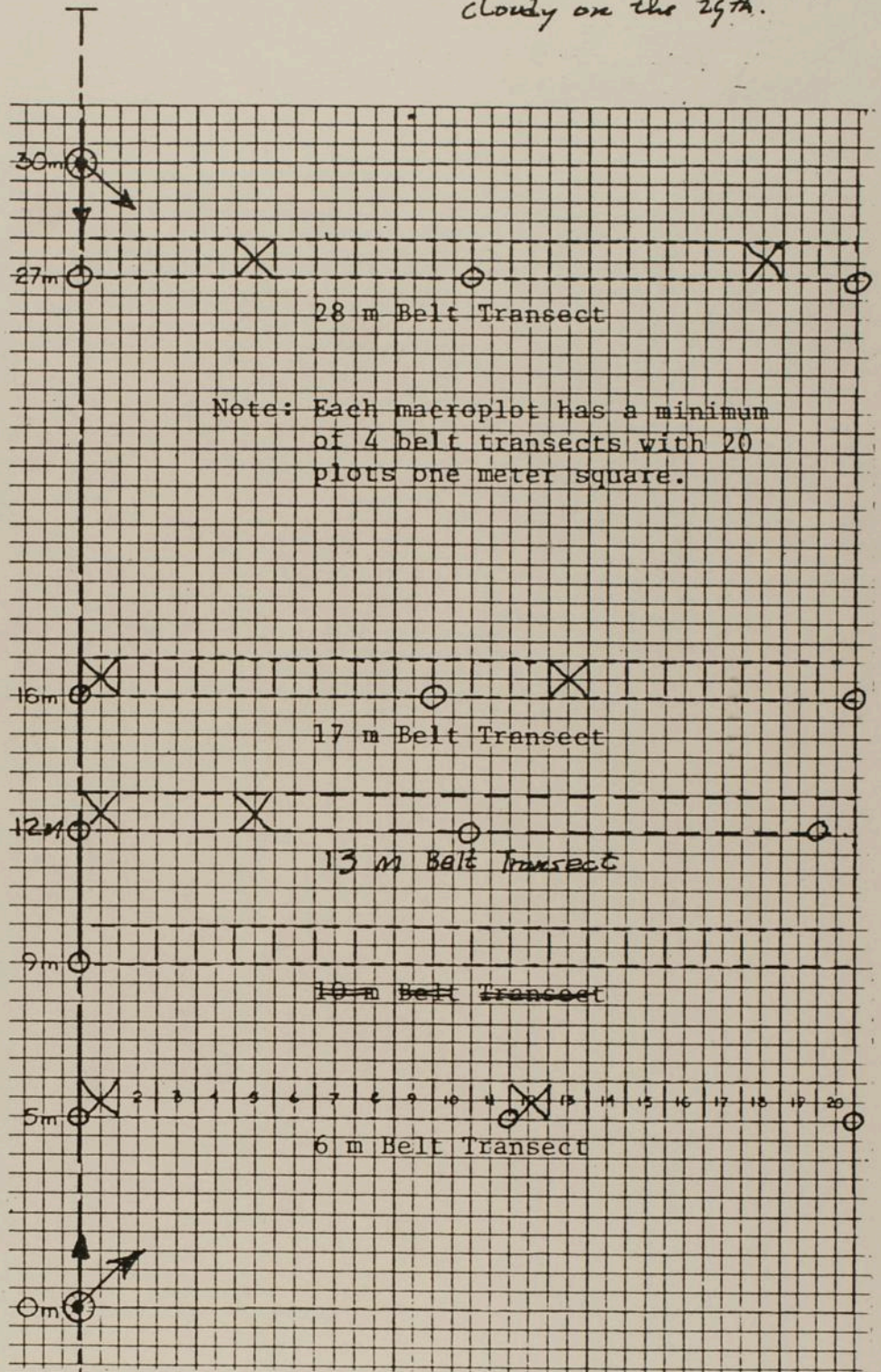
Baseline Distance from each reference post to:
 (1) 0 m. pin 62 cm
 (2) 30 m. pin 139 cm

All belt transects shall be laid out to the right of the base line. Lower edge of belt transect shall be coincident with measuring tape projecting perpendicularly from 5 m., 9 m., 16 m., and 27 m. plot pins on base line. Twenty plots one meter square shall be located and numbered from left to right, beginning at the baseline, within each belt transect. Nested plot frames must have smallest area unit in lower left corner of plot.

PHOTOGRAPHY REQUIRED

Minimum General Views are 0 m. to 30 m., and 30 m. to 0 m. Additional photos shall be shown by arrows (●→).

Notes
- on 6 m belt: stake at 11 m.
- on 13 m. belt: stake at 19 m.
- on 17 m. belt, stake at 9 m.
- Belt transect placed at 13 m. to avoid piñon pine on 10 m. belt, alignment.
- Disregard pin driven at 9 m on baseline
- Plot runs downhill from on R.P.



LEGEND

Base Tape — — — Plot Rebar ⊙
 Plot Bdry. — — — Plots Photo ⊗
 Reference Post ⊥ 1 meter □
 0-30 m. Pin ⊗

Macroplot Uederitz Flat No. 203 d Examiner J. Reveal Recorder J. Reveal Date 28-29 June 1980 Frame Size 1M.

No.	Species Name	Belt 6 m.		Belt 10 m.		Belt 17 m.		Belt 28 m.		Belt _____		Total % Frequency	
		Hfts	%	Hfts	%	Hfts	%	Hfts	%	Hfts	%		
5	<i>Artemisia tri. br.</i>	9	45	5	25	9	45	9	45			32	40
6	<i>Artemisia nova</i>	3	15	7	35	-	-	-	-			10	12.5
2	<i>Sitanion hystrix</i>	10	50	10	50	9	45	11	55			40	50
1	<i>Stipa thurberiana</i>	9	45	14	70	8	40	4	20			35	44
7	<i>Elymus cinereus</i>	3	15	-	-	-	-	1	5			4	5
9	<i>Phlox stansburyi</i>	9	45	8	40	4	20	1	5			22	30
23	<i>Asparagus sp.</i>	-	-	2	10	-	-	1	5			3	4
18	<i>Ephedra viridis</i>	-	-	-	-	-	-	-	-			0	-
-	<i>Pinon seedling</i>	1	5	-	-	-	-	-	-			1	1
27	<i>Tetradymia can.</i>	-	-	3	15	-	-	-	-			3	4
15	<i>Crepis acumin.</i>	2	10	6	30	-	-	1	5			9	11
14	<i>Agoseris glauca</i>	2	10	2	10	1	5	7	35			12	15
11	<i>Delphinium anders.</i>	1	5	-	-	-	-	-	-			1	1
38	<i>Chrysothamnus vis</i>	-	-	-	-	1	5	1	5			2	2.5
13	<i>Lomatium nevad.</i>	-	-	-	-	-	-	-	-			0	-
28	<i>Chrysothamnus wall.</i>	-	-	-	-	-	-	-	-			0	-
30	<i>Eriogonum elatum</i>	2	10	-	-	-	-	3	15			5	6
16	<i>Chaenactis doug.</i>	-	-	2	10	1	5	1	5			4	5
20	<i>Uyethia amplex.</i>	-	-	-	-	2	10	-	-			2	2.5

FIELD FREQUENCY DATA SHEET

Macroploot Uderitz Flat No. 203 d Examiner J. Reveal Recorder J. Reveal Date 28-29 June 1950 Frame Size 10/1

Page 2 of 2

No.	Species Name	Belt 6 m.		Belt 10 m.		Belt 17 m.		Belt 28 m.		Belt		Total % Frequ.
		Hits	%	Hits	%	Hits	%	Hits	%	Hits	%	
17	<i>Ribes velutinum</i>	1	5	3	15	-	-	-	-	4	5	
26	<i>Bromus laevis</i>	2	10	2	10	3	15	2	10	9	11	
25	<i>Rhus trident.</i>	1	5	-	-	-	-	1	5	2	2.5	
8	<i>Melica stricta</i>	2	10	-	-	-	-	-	-	2	2.5	
33	<i>Gnaphalium diff.</i>	3		1		2		6		12	15	
35	<i>Lygodesmia spinesc.</i>	-		1	5	-		4	20	5	6	
34	<i>Phacelia humilis</i>	-		1	5	9	45	14	70	24	30	
44	<i>Symphoricarpos v.</i>	-		-		3	15			3	4	
0.5 M												
32	<i>Collinsia parviflora</i>	7	35	13	65	6	30	6	30	32	40	
31	<i>Gilia cf. interior</i>	4	20	4	20	4	20	7	35	19	24	
21	<i>Eriogonum wilcoxii</i>	4	20	4	20	2	20	7	35	17	21	
29	<i>Coryphanthus ramosus</i>	8	40	6	30	6	30	6	30	26	32.5	
10	<i>Calceolus leucht.</i>	5	25	7	35	6	30	6	30	24	30	
12	<i>Lupinus nevadensis</i>	6	30	4	20	4	20	3	15	17	21	
0.2 M												
19	<i>Collinsia grandifl.</i>	10	50	11	55	9	45	6	30	36	45	

MACROPLOT NAME Wedertz Flat

NUMBER 203-d

DATE 28-29 June 1980

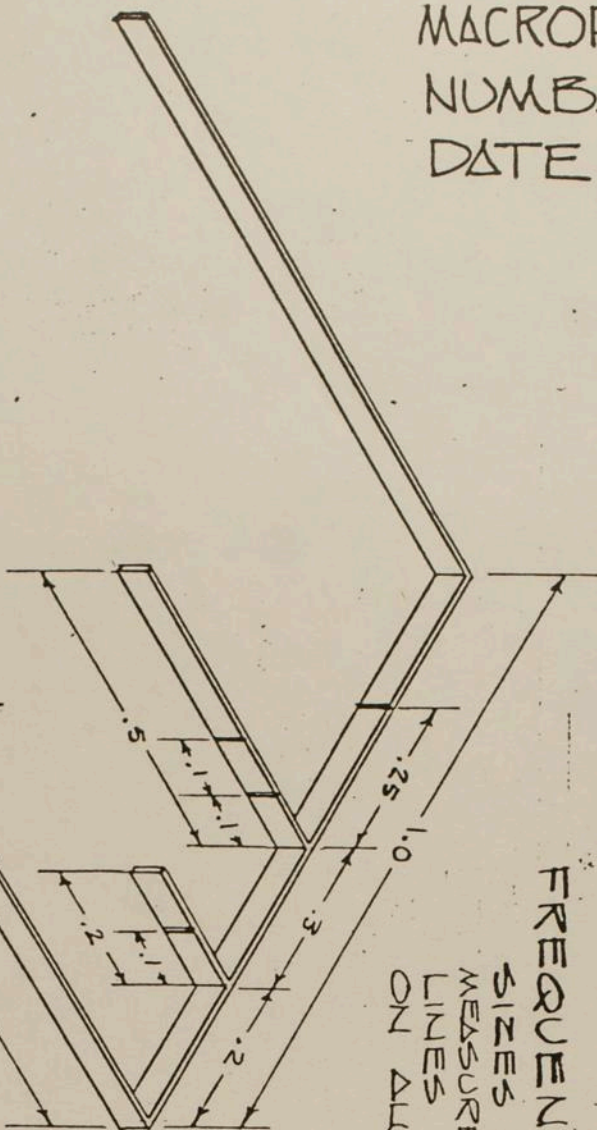
GROUND COVER WORKSHEET

	6 m. BELT	10 m. BELT	17 m. BELT	26 m. BELT	# FT.	%
BAKEGROUND	9	11	10	22	52	11
LITTER	83	81	95	85	344	72
VEG. BASAL	1	2	2	1	6	1
PAVEMENT	24	25	13	12	74	15
ROCK	3	1	-	-	4	1

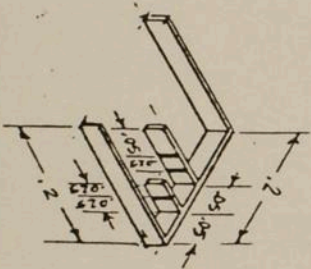
FREQUENCY FRAME DIMENSIONS

SIZES SHOWN IN METERS.
MEASUREMENTS TAKEN AT
LINES SCORED AS SHOWN
ON ALUMINUM FRAME.

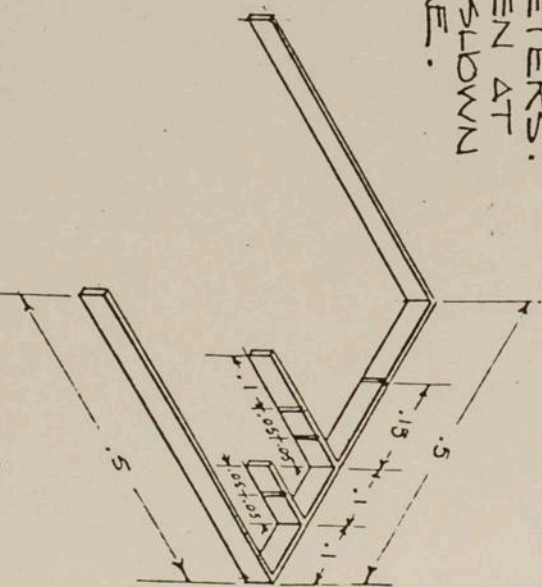
1 METER FRAME



.2 METER FRAME



.5 METER FRAME



LINE INTERCEPT RECORD

(Condition and Trend)

National Forest Toiyabe		Ranger District Bridgeport		Cluster Name Wedertz Flat		Transect No. 6 M		Examiner Jack Reveal		Date 28 June 1950	
Artr-tr Species		Arno Species		Ribes Species		Putr Species		Species			
Actual Intercept	Total cm.	Actual Intercept	Total cm.	Actual Intercept	Total cm.	Actual Intercept	Total cm.	Actual Intercept	Total cm.	Actual Intercept	Total cm.
70-121	51	314-31	17	670-716	46	980-1010	30				
166-252	86	775-923	48								
360-412	52										
452-86	34										
728-62	34										
968-81	13										
1217-72	55										
1345-61	16										
1383-1402	19										
1422-50	28										
1468-79	11										
1650-88	38										
1880-1921	41										
Total	478		65		46		30				

For trees and shrubs up to 4 feet above the ground.

Breaks in canopy of less than 10cm. will be counted as canopys.

Tape height at 0m 50 cm

Tape height at 20m 40 cm

LINE INTERCEPT RECORD

(Condition and Trend)

National Forest Toiyabe		Ranger District Bridgeport		Cluster Name Wedertz Flat		Transect No. 13M		Examiner Jack Reveal		Date 28 JUNE 1980	
Arct Species		Arno Species		Ribes Species		Tetradymia Species		Chryso. viscid. Species			
Actual Intercept	Total cm.	Actual Intercept	Total cm.	Actual Intercept	Total cm.	Actual Intercept	Total cm.	Actual Intercept	Total cm.		
120-57	27	242-72	30	1571-74	3	1805-23	18	1849-68	19		
183-96	13	337-64	27	1680-1720	40						
970-80	10	697-732	35								
1003-7	4	850-882	32								
1050-63	13	1118-63	45								
1445-60	15	1267-1325	58								
1475-88	13										
1528-48	20										
Total	115		227		43		18		19		

For trees and shrubs up to 4 feet above the ground.

Breaks in canopy of less than 10cm. will be counted as canopys.

Tape height at 0m 44 cm

Tape height at ~~20m~~ 54 cm
19m

LINE INTERCEPT RECORD

(Condition and Trend)

National Forest Toiyabe		Ranger District Bridgeport.		Cluster Name Wedertz Flat		Transect No. 17M		Examiner Jack Reveal		Date 28 June 1980	
Artr Species		Tetradymia Species		Ribes Species		Symphoricarpos Species		Chryso. viscidii Species			
Actual Intercept	Total cm.	Actual Intercept	Total cm.	Actual Intercept	Total cm.	Actual Intercept	Total cm.	Actual Intercept	Total cm.		
248-69	21	280-305	25	145-63	18	1092-1134	42	1390-1418	28		
405-16	11			558-60	2						
440-57	17										
740-90	50										
802-06	4										
904-1060	156										
1075-87	12										
1140-42	2										
1245-70	25										
1300-74	74										
1500-08	8										
1548-1640	92										
1673-93	20										
1716-40	24										
1812-48	36										
Total	552				20		42		28		

For trees and shrubs up to 4 feet above the ground.

Breaks in canopy of less than 10cm. will be counted as canopys.

Tape height at 0m 50 cm.

Tape height at 20m 66 cm.

LINE INTERCEPT RECORD

(Condition and Trend)

National Forest		Ranger District		Cluster Name		Transect No.		Examiner		Date	
Toiyabe		Bridgeport		Wedertz Flat		28M.		Jack Reveal		29 June 1980	
Artr Species		Ribes Species		Putr Species		Chryso. viscid. Species		Species			
Actual Intercept	Total cm.	Actual Intercept	Total cm.	Actual Intercept	Total cm.	Actual Intercept	Total cm.	Actual Intercept	Total cm.		
72-5	3	508-635	127	646-745	99	1992-2000	8				
1034-74	40	1380-90	10								
1188-1208	20										
1390-1538	148										
1691-1703	12										
1790-1907	117										
Total	340		137		99		8				

For trees and shrubs up to 4 feet above the ground.

Breaks in canopy of less than 10cm. will be counted as canopies.

Tape height at 0m 40 cm

Tape height at 20m 49 cm

<u>Plant Name</u>	<u>Phenology</u>
41 25. <u>Allium anceps</u>	<u>Seeds ripe</u>
42 26. <u>Stipa webberi</u>	<u>anthesis</u>
43 27. <u>Senecio intergerrimus var. exalt.</u>	<u>full bloom</u>
44 28. <u>Symphoricarpos vaccinoides</u>	<u>full bloom</u>
45 29. <u>Arabis cf. puber</u>	<u>seeds ripe ></u>
46 30. <u>Erigeron bloomeri</u>	<u>full bloom</u>
31. _____	
32. _____	
33. _____	
34. _____	
35. _____	
36. _____	
37. _____	
38. _____	
39. _____	
40. _____	

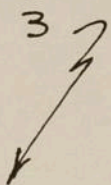
APPARENT TREND: This is a montane sage-grass type - an opening (bench-top) in Pinjon woodland at 7600' elevation. It is in good condition (to very good) and the trend is upward. The Ar-tr-tr. seems to be opening up, as there are many dead shrubs, and the opening thus created are filling with Silph and Stth. (See photos #7 & #8 for an example). Livestock use appears to be light to moderate in the locality.

(The Wedertz flat plot has 46 plant species - the largest number found on any of the 16 plots done in 1980)

<u>Plant Name</u>	<u>Phenology</u>
25. <i>Purshia tridentata</i>	< seeds ripe
26. <i>Bromus tectorum</i>	dough
27. <i>Tetradymia canescens</i>	twig growth > flower buds
28. <i>Chrysothamnus nauseosus</i> sp. <i>hololeucus</i>	twig growth starts
29. <i>Cordylanthus ramosus</i>	Growth starts
30. <i>Eriogonum elatum</i>	flower stalks appear
31. <i>Gilia</i> cf. <i>interior</i>	bloom over
32. <i>Collinsia parviflora</i>	plants dry
33. <i>Gayophytum diffusum</i> var. <i>parviflorum</i>	bloom over
34. <i>Phacelia humilis</i>	full bloom
35. <i>Lygodesmia spinosa</i>	Growth begins >
36. <i>Prunus andersonii</i>	bloom over
37. <i>Gayophytum racemosum</i>	full bloom
38. <i>Chrysothamnus viscidiflorus</i> vis.	Twig growth starts >
39. <i>Eriogonum umbellatum</i>	flower buds appear
40. <i>Grayia spinosa</i>	Twig growth starts

APPARENT TREND:

continued -
page
3



Macroplot Name Wedertz Flat No. 203-d Date 28-29 June
1980PLANT LIST

<u>Plant Name</u>	<u>Phenology</u>
1. <u>Stipa thurberiana</u>	<u>anthesis</u>
2. <u>Sitanion hystrix</u>	<u>"</u>
3. <u>Poa sandbergii</u>	<u>Heads out fully</u>
4. <u>[not used]</u>	
5. <u>Artemisia tridentata ssp. tr.</u>	<u>twig growth starts ></u>
6. <u>Artemisia nova</u>	<u>flower buds appear</u>
7. <u>Elymus cinereus</u>	<u>flower stalks appear ></u>
8. <u>Melica stricta</u>	<u>heads out fully > anthesis</u>
9. <u>Phlox stansburyi</u>	<u>full bloom</u>
10. <u>Calochortus leitchlinii</u>	<u>" "</u>
11. <u>Delphinium andersonii</u>	<u>" "</u>
12. <u>Lupinus nevadensis</u>	<u>bloom over > seed ripe</u>
13. <u>Lomatium nevadense var. parishii</u>	<u>bloom over > seed ripe</u>
14. <u>Agoseris glauca var. laciniata</u>	<u>full bloom</u>
15. <u>Crepis acuminata</u>	<u>" "</u>
16. <u>Chaenactis douglasii</u>	<u>" "</u>
17. <u>Ribes velutinum</u>	<u>twig growth starts ></u>
18. <u>Ephedra viridis</u>	<u>full bloom</u>
19. <u>Collomia grandiflora</u>	<u>flower stalks appear ></u>
20. <u>Wyethia amplexicaulis</u>	<u>full bloom ></u>
21. <u>Eriastrum wilcoxii</u>	<u>< " "</u>
22. <u>Lewisia rediviva</u>	<u>" "</u>
23. <u>*Astragalus sp.</u>	<u>Seeds ripe</u>
24. <u>Antennaria dimorpha</u>	<u>" " ></u>

Continued -
page

* Too dry to det. species.

APPARENT TREND
(FSH 2209.21 Chap. 41.28)

VEGETATION

Up or Stable

1. Desirable frequency groupings and age classes of desirables, intermediates and least desirables. ✓
2. Forage plants not being pulled up or trampled out by grazing. ✓
3. Vigor of key species high as indicated by leaf length, seed stock production and normal color. ✓
4. Browse species showing no hedging. ✓

Down

1. A disproportionate amount of intermediates and least desirables. Seedlings of better plants having difficulty in becoming established.
2. Forage species being pulled up and trampled out by grazing.
3. Low vigor of key species as indicated by reduced size of plant, leaf length of seed stalks, and off color (sickly yellow).
4. Browse species showing moderate to heavy hedging.

SOIL

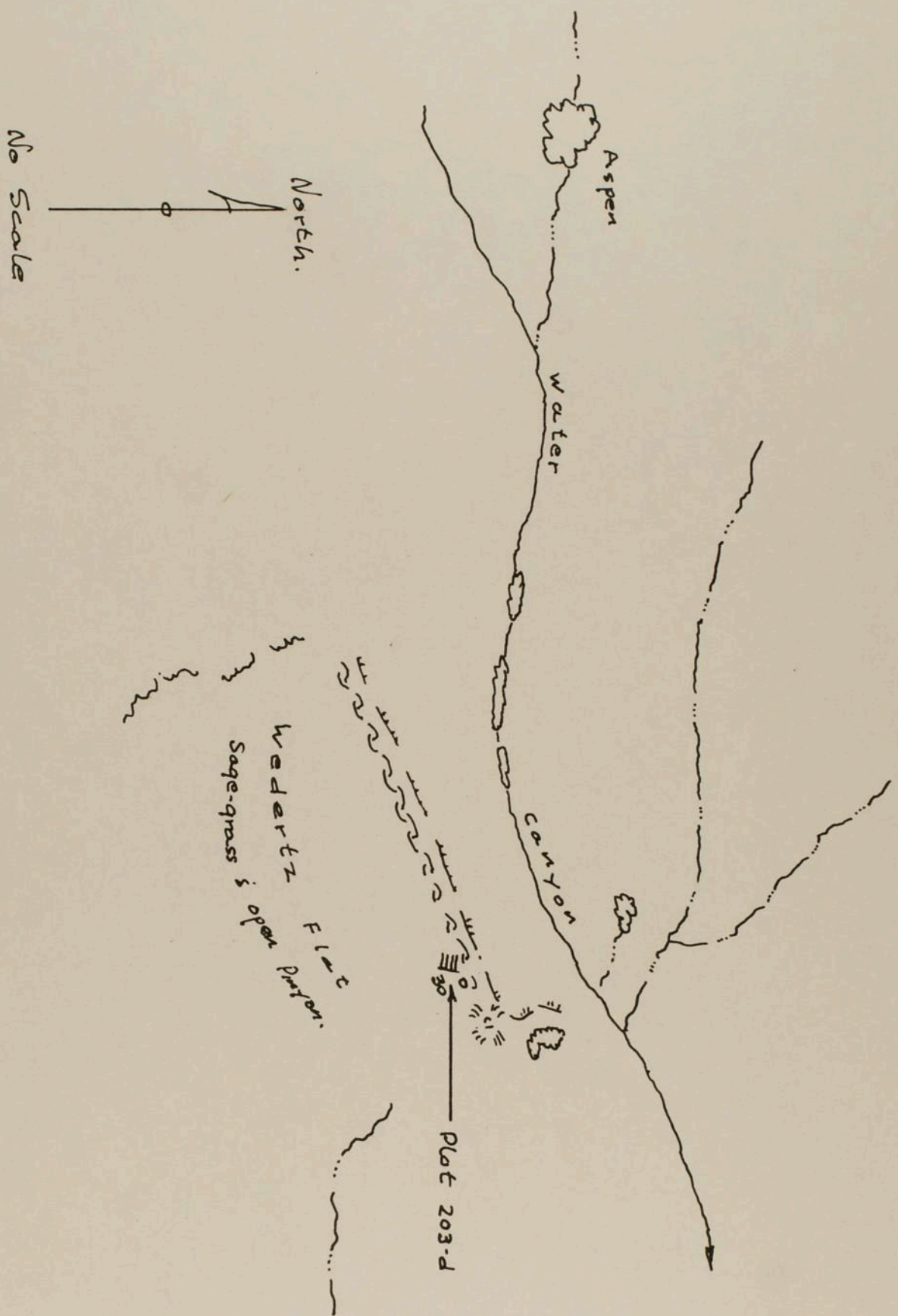
Up or Stable

1. Ground cover dispersion — uniform.
2. No detectable soil movement. ✓
3. Soil surface continuous and intact. ✓
4. No exposure of plant roots. ✓
5. Stones and rock fragments, where present, normal and in place — no movement of rock fragments. ✓
6. Lichen lines on stones and rock fragments extend to soil level. ✓
7. No active gullies. ✓
8. No recent soil deposits either alluvial or aeolian. ✓
9. No wind-scoured depressions. ✓

Down

1. Ground cover dispersion — variable to highly variable. ✓
2. Soil movement detectable.
3. Cupping out between soil remnants.
4. Plant roots exposed.
5. Stones and rock fragments, where present, concentrating on surface as erosion pavement. Fragments loose and often moving downslope.
6. Lichen lines on stones considerably above soil surface — no lichens on rock fragments.
7. Active gullies — indicated by recent cutting and sloughing.
8. Recent soil deposits — alluvial or aeolian.
9. Wind-scoured depressions.

J12 9/80.



Sketch Map for the
 WEDERTZ FLAT MACROPLOT # 203-D.
 28-29 June 1980

FIELD PHOTO RECORD

Macroplot Name wedertz Flat Number 203 d Date 28-29 June 1980Photos by: Jack L. RevealCamera Canon AE-1 Lens 50 mm Film Kodacolor 400

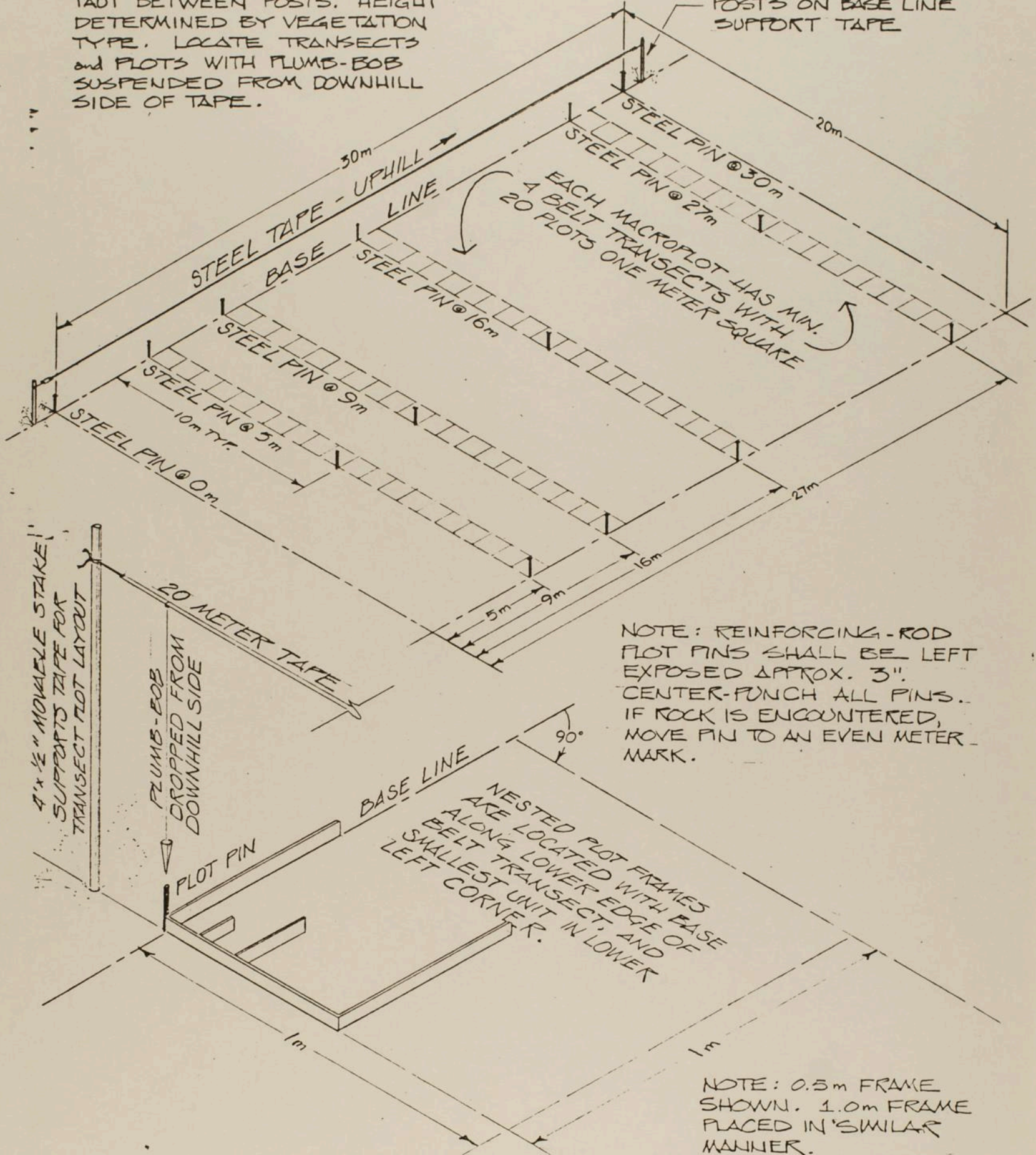
28 June →

Photo # <u>1</u> Hour <u>1340</u> Expos. <u>250/16</u> Subject: <u>Baseline from O-M R.P.</u> <u>Note: line runs downhill</u>	Photo # <u>2</u> Hour <u>1345</u> Expos. <u>250</u> Subject: <u>f16</u> <u>View across plot ca. 45° Rt.</u> <u>from OM RP</u>
Photo # <u>3</u> Hour <u>1350</u> Expos. <u>250/16</u> Subject: <u>Baseline from 30-M R.P.</u>	Photo # <u>4</u> Hour <u>1350</u> Expos. <u>250</u> Subject: <u>f16</u> <u>View across plot from 30M</u> <u>RP - ca. 45° Left.</u>
Photo # <u>5</u> Hour <u>1505</u> Expos. <u>250/16</u> Subject: <u>Plot 6-1. Lf. corner on O pin</u> <u>Artr, Stipa</u>	Photo # <u>6</u> Hour <u>1510</u> Expos. <u>250</u> Subject: <u>f16</u> <u>Plot 6-12. - Lf. corner</u> <u>of frame on 11M pin.</u> <u>Siky, Stipa (Lf. corner) Elymus</u>
Photo # <u>7</u> Hour <u>1730</u> Expos. <u>125/16</u> Subject: <u>(overcast)</u> <u>Plot 13-1. Lf. corner on OM pin.</u> <u>stipa, lupine, calochortus, crepis,</u> <u>astragalus</u>	Photo # <u>8</u> Hour <u>1740</u> Expos. <u>125/14</u> Subject: <u>(overcast)</u> <u>Plot 13-6. - Siky, Artr,</u> <u>lupine, Phlox stensburyi, crepis</u> <u>calochortus</u>
29 June → ↓ Photo # <u>9</u> Hour <u>0830</u> Expos. <u>125/11</u> Subject: <u>29 June</u> <u>Plot (7-1). Lf. corner on OM</u> <u>pin.</u> <u>Siky, Artr</u>	Photo # <u>10</u> Hour <u>0840</u> Expos. <u>125</u> Subject: <u>f11</u> <u>Plot 17-13</u> <u>Artr, Siky, Chrysothamnus</u> <u>viscid.</u>
Photo # <u>11</u> Hour <u>0930</u> Expos. <u>250/16</u> Subject: <u>Plot 28-5</u> <u>Siky, Stipa, Phacelia</u>	Photo # <u>12</u> Hour <u>0940</u> Expos. <u>125</u> Subject: <u>f16</u> <u>Plot 28-18</u> <u>Artr, Eriogonum, phacelia</u>
Photo # <u>13</u> Hour <u>1030</u> Expos <u>250/16</u> Subject: <u>"Approach" shots from helicopter</u> <u>looking ca. west & North.</u> <u>3 shots: 13-1, 13-2, 13-3.</u>	Photo # _____ Hour _____ Expos _____ Subject: _____

EXHIBIT 1 TYPICAL FREQUENCY MACROPLOT LAYOUT DIAGRAM

TAPE SHALL BE STRETCHED TAUT BETWEEN POSTS. HEIGHT DETERMINED BY VEGETATION TYPE. LOCATE TRANSECTS AND PLOTS WITH PLUMB-BOB SUSPENDED FROM DOWNHILL SIDE OF TAPE.

STEEL REFERENCE POSTS ON BASE LINE SUPPORT TAPE



NOTE: REINFORCING-ROD PLOT PINS SHALL BE LEFT EXPOSED APPROX. 3". CENTER-PUNCH ALL PINS. IF ROCK IS ENCOUNTERED, MOVE PIN TO AN EVEN METER MARK.

NESTED PLOT FRAMES ARE LOCATED WITH BASE ALONG LOWER EDGE OF BELT TRANSECT, AND SMALLEST UNIT IN LOWER LEFT CORNER.

NOTE: 0.5m FRAME SHOWN. 1.0m FRAME PLACED IN SIMILAR MANNER.

PHENOLOGY (based on: AEC at Oakridge Tennessee & Dr. Neil West)

Grass - leaf starts growth
flower stalks appear
heads out fully
anthesis
dough
hard seed
seed dissemination starts
plants begin to dry
plants dry

Forbs - growth starts
flower stalks appear
first bloom
full bloom (3/4 blossom)
bloom over (3/4 blossom dry)
seeds ripe (3/4 dry)
dissemination starts
plants begin to dry
plants dry

Shrub - leaf growth starts
twig growth starts
flower buds appear
first bloom
full bloom (3/4 blossom)
bloom over (3/4 blossom dry)
seed ripe (3/4 dry)
dissemination over
leaves dry and begin to drop

Bits of Work
for one Macroplot (Burham Pond)

Mac Sheet - $11 + 2 + 12 + 8 + 4 + 2 = 39$

Ground Cover $480 + 3 + 16 + 10 = 509$

frequency $12 + 30 + 30 + 240 + 60 = 372$

Lino Inter $24 + 8 + 6 + 4 = 42$
 $(12 + 12 + 12) \times (4) = 144$

Plant List - $6 + 30 \times 30 = 66$

field photo $7 + (8 \times 13) = 111$

Legend - $13 = 13$

Map - USGS - $3 = 3$

Maps (Sketch) $43 = 43$

1341
= 1350

photos 13×8



104
1454 =

x 16 plots

Collect, check & record : $= \underline{\underline{23,264}}$ ~~bits~~ bits of data

PLANT LIST

BRIDGEPORT R.D. MACROPLOTS - 1980

PLANT SPECIES  | MACROPLOT  ⁽²⁾

GRASSES

Leucopoa kingii

Melica bulbosa

M. spectabilis

M. stricta

Muhlenbergia richardsonii

Oryzopsis hymenoides

STORK DRIVE
GREEN RANCH
Low. Stage Rd.
Jones Pasture
Cottonwood
Burcham Cr.
Wedertz Flat
Burcham Pond
Long Valley
Frying Pan
Alex Brown
Swager Flat
Lobdell Lake
Hunteon Cny
Piute Pass
Long Canyon

X

X X

X

X

X

X

X

X

X

X

X

X

X

X

X

J. Reveal 1980

PLANT LIST

BRIDGEPORT R.D. MACROPLOTS - 1980

PLANT SPECIES



MACROPLOT



GRASSES

3)

PLANT SPECIES	MACROPLOT	GRASSES	STOCK DRIVE	GREEN RANCH	Low. Stage Rd.	Jones Pasture	Cottonwood	Burcham Cr.	Wedertz Flat	Burcham Pond	Long Valley	Frying Pan	Alex Brown	Swager Flat	Loddell Lake	Hunteon Cny	Piute Pass	Long Canyon
<i>Poa cusickii</i>										X	X*	X						
<i>P. nevadensis</i>							X	X				X*			X			
<i>P. sandbergii</i> (<i>P. secunda</i>)			X									X						
<i>P. scabrella</i>																		
<i>Sitanion hystrix</i>			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Stipa comata</i>				X														
<i>S. nevadensis</i>			X	X						X	X	X	X	X	X	X	X	X
<i>S. occidentalis</i>							X			X	X							
<i>S. pinetorum</i>											X	X						
<i>S. thurberiana</i>			X	X		X		X		X								
<i>S. webberi</i>							X	X										
<i>Trisetum spicatum</i>																X		

* off Plot

J. Reveal 1980

PLANT LIST

BRIDGEPORT R.D. MACROPLOTS - 1980

PLANT SPECIES



MACROPLOT



GRASS-LIKE

Carex valliscola

C. douglasii

Juncus balticus

STOCK DRIVE
 GREEN RANCH
 Low. Stage Rd.
 Jones Pasture
 Cottonwood
 Burcham Cr.
 Wedertz Flat
 Burcham Pond
 Long Valley
 Frying Pan
 Alex Brown
 Swager Flat
 Lobdell Lake
 Huntoon Cny
 Piute Pass
 Long Canyon

X

X

X

X

X

X

X

X

X

X

J. Reveal 1980

PLANT LIST

BRIDGEPORT R.D. MACROPLOTS - 1980

PLANT SPECIES



MACROPLOT



FORBS

2

Aster adscendens

Balsamorhiza sagittata

Calyptridium umbellatum

Calochortus leuchtlinii

Collomia grandiflora

C. tinctoria

Collinsia parviflora

Chaenactis douglasii

Chaenactis xantiana

Chorizanthe watsonii

STOCK DRIVE
GREEN RANCH
Low. Stage Rd.
Jones Pasture
Cottonwood
Burcham Cr.
Wedertz Flat
Burcham Pond
Long Valley
Frying Pan
Alex Brown
Swager Flat
Lobdell Lake
Huntoon Cny
Piute Pass
Long Canyon

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

J. Reveal 1980

PLANT LIST

BRIDGEPORT R.D. MACROPLOTS - 1980

PLANT SPECIES



MACROPLOT



FORBS

4

PLANT SPECIES	MACROPLOT	FORBS
<i>Delphinium andersonii</i>		X
<i>Descuriana californica</i>		X
<i>Descuriana pinnata</i>		X
<i>Eriastrum wilcoxii</i>		X
<i>Eriogonum elatum</i>		X
<i>E. umbellatum</i>		X
<i>E. uriginifolium</i> var. <i>subscaposum</i>		X
<i>E. spergulinum</i>		X
<i>E. cf. brachyanthum</i>		X
<i>E. ovalifolium</i>		X
<i>Erysimum perenne</i>		X
<i>Erigeron bloomeri</i>		X
<i>E. eatonii</i> ssp. <i>plantaginifolius</i>		X
<i>E. pygmaeus</i>		X
<i>Erigeron coulteri</i> var. <i>hartii</i> - <i>swageri</i> Grell.		X

STOCK DRIVE
 GREEN RANCH
 Low. Stage Rd.
 Jones Pasture
 Cottonwood
 Burcham Cr.
 Wedertz Flat
 Burcham Pond
 Long Valley
 Frying Pan
 Alex Brown
 Swager Flat
 Lobdell Lake
 Huntoon Cny
 Piute Pass
 Long Canyon

J. Reveal 1980

PLANT LIST

BRIDGEPORT R.D. MACROPLOTS - 1980

PLANT SPECIES



MACROPLOT



FORBS

5

PLANT SPECIES	STOCK DRIVE	GREEN RANCH	Low. Stage Rd.	Jones Pasture	Cottonwood	Burcham Cr.	Wedertz Flat	Burcham Pond	Long Valley	Frying Pan	Alex Brown	Swager Flat	Loddell Lake	Huntoon Cny	Piute Pass	Long Canyon Bench
<i>Frasera speciosa</i>								X								
<i>Fritillaria atropurpurea</i>													X			
<i>Gayophytum decipiens</i>						X					X					
<i>G. racemosum</i>					X		X									
<i>G. diffusum ssp. parviflorum</i>	X	X		X	X		X		X	X		X	X	X	X	X
<i>Gilia capillaris</i>	X															
<i>Gilia interior</i>		X	X				X									
<i>Hachelia pratensis</i>													X			X
<i>Helenium hoopseii</i>									X				X	X		
<i>Iva axillaris</i>										X						
<i>Layia douglasii</i>			X													

J. Reveal 1980

PLANT LIST

BRIDGEPORT R.D. MACROPLOTS - 1980

PLANT SPECIES



MACROPLOT



FORBS

9

Rumex pauciflorus

(*Salvia* cf. *dorrice*) (see shrubs)

Senecio cymbalaroides

S. intergerimus var. *exaltatus*

Sidalcea multifida

Silene verecunda ssp. *andersonii*

Stellaria longipes

STOCK DRIVE
GREEN RANCH
Low. Stage Rd.
Jones Pasture
Cottonwood
Burcham Cr.
Wedertz Flat
Burcham Pond
Long Valley
Frying Pan
Alex Brown
Swager Flat
Lobdell Lake
Huntoon Cny
Piute Pass
Long Canyon

X

X

X

X

(X)

X

X

X

X

X

J. Reveal 1980

Specimens

Holmgren - Annotations 1980 Fido

S. elmeri 2360 • Sumner
P. sandbergii 2344 W. Waller - Kunta Mds
P. gracillima 2345 w/ 2344 (2 specimens) + 2345
P. nevadensis 2354 Summers Mds
P. fendleriana 2352 " "
Stiperyzopsis bloomeri 2388 Sumner Mds
S. occidentalis 2362 " "
~~*Poa nevadensis*~~ 2346 (w/ 2344 + 45)
Poa nevadensis 2350 Sweetwater Cr.
P. fendleriana 2353 "
P. sandbergii 2349 Upper Powell
P. Sandbergii 2320 Upper Kunta Mds
P. ampla 2334 Stockade Flat
S. nevadensis 2364 Labrosse Cr.
P. knutsensis 2321 Stockade Flat
P. " 2335 " "
S. nevadensis 2339 Richey Peak
S. occidentalis 2337 upper Kunta
S. lettermanii 2342 Waller Mds.
S. elmeri 2365 Labrosse Cr.
S. pueblorum 2361 Sumner Mds
 [P ampla] [P. spilis 2358 " "
 [S. calif.] *S. nevadensis* 2356 Summers Mds.
 [S. calif.) *S. nevadensis* 2363 Summers Mds.
S. nevadensis 2338 Sweetwater
Poa sandbergii [P. fendleriana] 2348 Sumner Mds