

APPENDIX E.  
PROJECT CORRESPONDENCE

(See back or attached)

AD838 - Vendor (APOS 8/87)

Order Number: 43-67T0-9-0124 Sub:

Page 01 of 01	Contract Number	Order Date June 22, 1989	This Number must appear on all Invoices, Packages, and Papers Relating to this Order.
Seller's Ident. No.	Form 1099 No	Taxpayer's Ident. No.	

to: (Seller's Name and Address) NATURE CONSERVANCY  3165 UNIVERSITY STATION LARAMIE WY 82071	SHIP TO	Consignee: USDA FOREST SERVICE BLACK HILLS NATIONAL FOREST RR2 BOX 200 CUSTER SD 57730
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Line Item	Description	Quantity	Unit		Amount
			Issue	Price	
	TECHNICAL CONTACT IS STEVE LIBBY. PLEASE CONTACT HIM WITH ANY QUESTIONS. PHONE # (605)673-2251.				
01	SENSITIVE PLANT INVENTORY OF THE NORTH-WESTERN BLACK HILLS. SEE SPECIFICATIONS IN ATTACHMENT I. COMPLETION DATE BY DECEMBER 31, 1989.	1	JOB	3000.000	3000.00
02	SUITABILITY INVESTIGATION REPORTS FOR DUGOUT GULCH AND ALVA SUMMIT PROPOSED BOTANICAL AREAS. SEE SPECIFICATIONS IN ATTACHMENT II. COMPLETION DATE BY SEPTEMBER 31, 1989.	1	JOB	2500.000	2500.00

F. O. B. Point Destination	Deliver to Consignee Address on or Before December 31, 1989	TOTAL >	5500.00
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Ship Via	Discount Terms Net 30 Days
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Billing Address (DO NOT SHIP ORDER HERE) (Ship to Consignee Address above) USDA FOREST SERVICE BLACK HILLS NATIONAL FOREST RR2, BOX 200 CUSTER SD 57730	BILLING INSTRUCTIONS: Do not submit bill in advance of shipment. Send invoice with our Order Number to Billing Address at left. Failure to show our Order Number will delay payment. Freight charge over \$100 requires bill of lading. Include your DUNS number on each invoice.
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Issuing Office: USDA FOREST SERVICE BLACK HILLS NATIONAL FOREST RR2, BOX 200 CUSTER SD 57730	Ordered By: (Name and Title) YVONNE STERUD CONTRACTING OFFICER Commercial Phone Number: (605) 673-2251 Authorized Signature: <i>Yvonne Sterud</i>
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SELLER'S ORIGINAL

6/22/89

# The Nature Conservancy

Black Hills Nat  
18 December 87  
3165 University Station  
Rocky Mountain Heritage Task Force  
Laramie, WY 82071  
1370 Pennsylvania Street, Suite 190  
Denver, Colorado 80203  
(307) 766-3441

Darrell Kenops, Forest Supervisor  
Black Hills National Forest  
RR 2 Box 200  
Custer, SD 57730

Dear Mr. Kenops:

In April, 1986, the Rocky Mountain Heritage Task Force of The Nature Conservancy hired me as "Wyoming Botanist" to assist the Wyoming Dept. of Environmental Quality in maintaining natural diversity databases for the state, and to help with the Conservancy's natural areas protection efforts. My job includes working with public lands agencies in natural areas inventory, designation and management, and so last week, I attended the US Forest Service Region 2 Research Natural Area committee meeting in Fort Collins.

During the meeting, it was mentioned that Suitability Investigation Reports are still needed for the proposed Special Botanical Areas on Black Hills National Forest (Dugout Gulch and Alva Summit). These are high-priority sites with us, and we would like to see designation as soon as possible. For this reason, I am submitting the enclosed proposal to complete the required reports on a contract basis.

Thank you for your consideration. If you have any questions, please call me.

Sincerely,



Hollis Marriott  
Wyoming Botanist, Rocky Mountain Heritage Task Force

cc: Ben Brown, Director, Rocky Mountain Heritage Task Force; Barry Johnston,  
Regional Ecologist, US Forest Service, Region 2.



## CONTRACT PROPOSAL TO BLACK HILLS NATIONAL FOREST FOR FY88

OBJECTIVES: Provide Suitability Investigation Reports for Dugout Gulch and Alva Summit Proposed Special Botanical Areas (SBAs)

CONTRACTOR: Rocky Mountain Heritage Task Force  
The Nature Conservancy  
3165 University Station  
Laramie, WY 82071

### BACKGROUND

The Black Hills have long been recognized for their floristic diversity and interesting plant geography (Ludlow 1875, McIntosh 1931). Although situated in the heart of the northern Great Plains, the uplift's vegetation is composed of elements of five of the major biomes of North America: the Rocky Mountains, the Great Plains, the Eastern Deciduous Forest biome, the Northern Coniferous Forest biome, and, to a minor extent, the Great Basin. There are many plant species in the Black Hills that are rare for the region, though common in other parts of North America. For many of the Eastern Deciduous Forest and Northern Coniferous Forest plant species, Black Hills populations are disjunct from the main ranges of the species.

Certain areas of the Black Hills have relatively high concentrations of disjunct plant species. Two of these sites, Dugout Gulch and Alva Summit, were nominated for special management by the Wyoming Natural Area Needs Workshop (Collins 1985). Both are located on the Black Hills National Forest in Wyoming. Dugout Gulch, a tributary to Sand Creek south of Beulah, contains a long list of plant species rare for Wyoming and the region. Habitat types are of the Ostrya virginiana (hophornbeam) and Quercus macrocarpa (bur oak) Series, also unusual for the region. The Alva Summit, between Alva and Aladdin, contains many plant species that are disjunct in the Black Hills. Plant communities are dominated by ponderosa pine (Pinus ponderosa), aspen (Populus tremuloides) and paper birch (Betula papyrifera). Site maps and lists of plant species and communities of concern for the two proposed SBAs are included in this proposal.

## PROJECT GOALS

The goals of the project are:

- 1) to inventory the proposed SBA's to determine distribution of plant species and communities of concern;
- 2) to evaluate the proposed SBAs, and to make recommendations concerning designation and management.

Brief descriptions of the natural features of the study areas, including plant associations, would be provided, as required by the Suitability Investigation Report form of the USFS, Region 2. The history of human use in the areas would be summarized. A detailed map with recommended boundaries for the SBAs and ownership information would accompany the report.

The project would generate maps of known sensitive plant populations and target plant communities. Occurrences would be mapped on USGS 7.5' topographic maps. Element occurrence records would be entered in the Wyoming Natural Heritage database currently maintained by the Wyoming Dept. of Environmental Quality, and hard copies would accompany the maps. Included in the report would be management recommendations for the SBAs, if the areas are determined to be suitable for designation.

## LOCATION OF PROJECT

Survey work would take place in the areas delimited on the accompanying maps. Mapping, computerization and report preparation would be done at the Rocky Mountain Heritage Task Force office at the University of Wyoming, Laramie, Wyoming.

## PROJECT SCHEDULE

The proposed project would take place during the 1988 fiscal year. Field work would be done during June or July. Reports and maps would be completed by September 30, 1988.

Oct 31, 1989.

## FUNDING

The cost of field work and report/map preparation is estimated to be \$2500. We request that this amount be provided by Black Hills National Forest to the Rocky Mountain Heritage Task Force of The Nature Conservancy on a contract basis.

DOGWOOD GULCH  
Crook Co., Wyoming  
T52N R60W S19, 30

Plant Species of Concern (after Collins 1985, Marriott 1986)

Asclepias ovalifolia  
Botrychium virginianum  
Carex eburnea  
C. peckii  
C. retrorsa  
C. rosea  
Celastrus scandens  
Festuca subulata  
Geum canadense  
Halenia deflexa  
Ionicera dioica

Maianthemum canadense  
Ostrya virginiana  
Pellaea atropurpurea  
Phryma leptostachya  
Polygala senega  
P. verticillata — no specimen?  
Polygonatum biflorum  
Polystichum lonchitis  
Rubus pubescens  
Stipa spartea  
Viburnum oculis

Plant Associations of Concern (after Collins 1985, Johnston 1984)

Ostrya virginiana/Crataegus succulenta habitat type  
Ostrya virginiana/Betula papyrifera habitat type  
Quercus macrocarpa Series

— approx boundaries of study area

(S. DAK.) R 61 W 10 (BEULAH) BEULAH 4.3 MI R 60 W 5



BLACK

ALVA SUMMIT  
Crook Co., Wyoming  
T54N R62W S20

Plant Species of Concern (after Collins 1985, Marriott 1986)

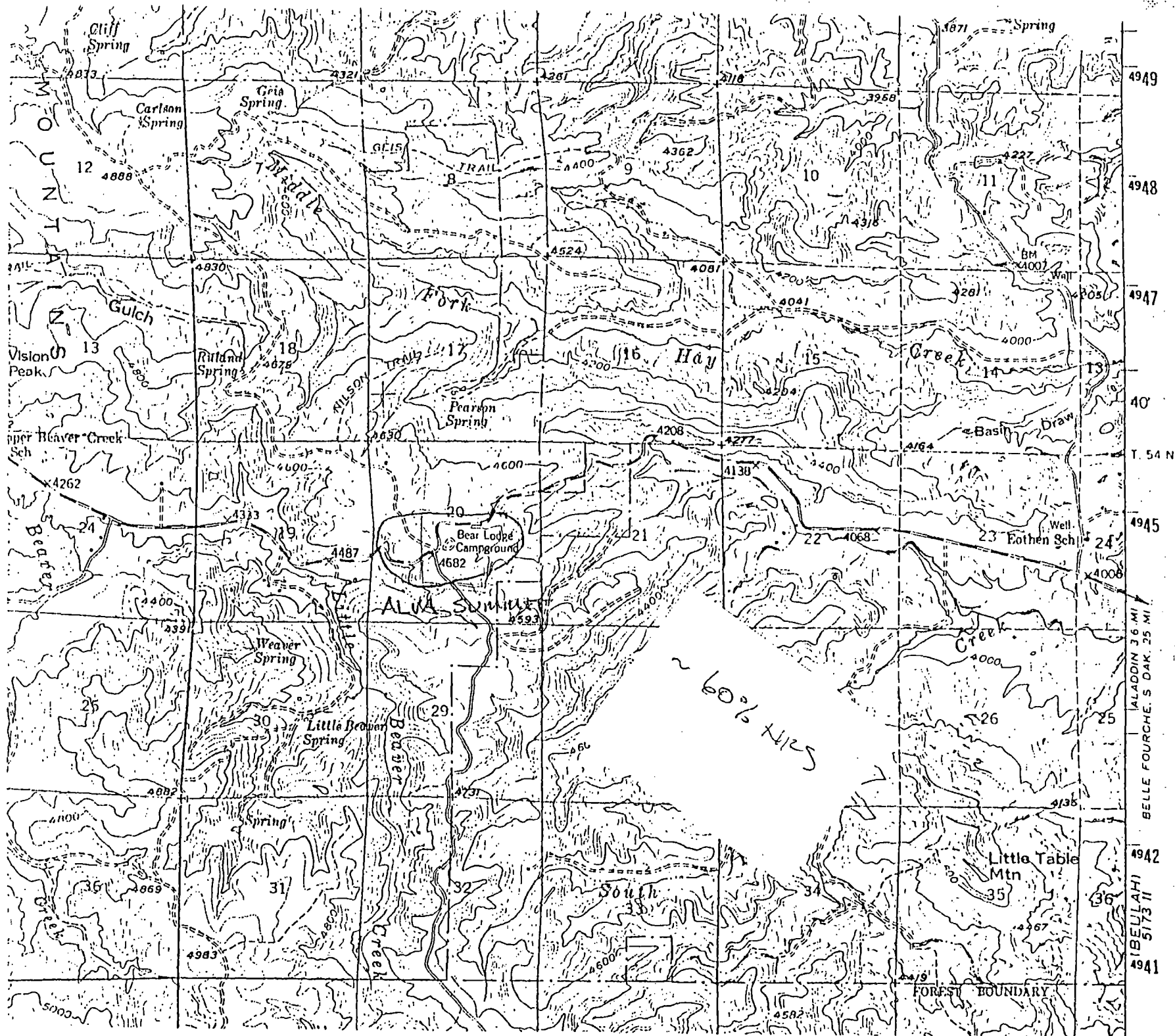
<u>Botrychium lunaria</u> ( <u>B. minoanense</u> )	<u>Maianthemum canadense</u>
<u>Carex richardsonii</u>	<u>Myosotis verna</u>
<u>C. rosea</u>	<u>Navarretia intertexta</u>
<u>C. tenera</u>	<u>Polygala verticillata</u>
<u>Ceanothus herbaceus</u>	<u>Potamogeton diversifolius</u>
<u>Halenia deflexa</u>	<u>Pyrola elliptica</u>
<u>Helianthemum bicknellii</u>	<u>Selaginella rupestris</u>
<u>Lathyrus ochroleucus</u>	<u>Solidago speciosa</u>

Plant Associations of Concern (after Collins 1985, Johnston 1984)

Betula papyrifera Series



200 ft  
standards  
of  
level area



1/4 SECTION 36 MI  
BELLE FOURCHE, S. DAK. 25 MI

1/4 SECTION 36 MI  
BELLE FOURCHE, S. DAK. 25 MI

REFERENCES CITED

Collins, E. I., ed. 1985. Wyoming Natural Area Needs Workshop Proceedings. Arlington, VA: The Nature Conservancy.

Johnston, B. C. 1984. Plant Associations of Region Two. Edition 31/2. Lakewood, CO: USDA Forest Service.

Ludlow, W. 1875. Report of a reconnaissance of the Black Hills of Dakota made in the summer of 1874. Washington, D.C.: Department of Engineers, U.S. Army.

Marriott, H. 1986. Checklist of Vascular Plants of the Northwestern Black Hills, Crook and Weston Counties, Wyoming. Custer, SD: Pooperson's Guidebooks.

McIntosh, a. J. 1931. a botanical survey of the Black Hills of South Dakota. Black Hills Engineer 19:159-276.