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Exclosures and Natural Areas on Rangelands in Utah

W. A. Laycock

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COVER: This enclosure on the Beaver District of the Fishlake National Forest is typical of the many two-part enclosures found throughout Utah. In this enclosure, cattle were excluded, while deer were permitted behind the fence in the area on the right. Both cattle and deer were excluded in the area on the left. Note lack of aspen reproduction where deer were permitted and abundant reproduction where they were excluded.

FOREWORD

The following members of the Research Committee of the Utah Section of the American Society of Range Management assisted materially in the compilation of this list: Mont E. Lewis, Chief, Branch of Range Studies and Training, Regional Office, Intermountain Region, USDA Forest Service, Ogden, Utah; Homer D. Stapley, Biologist (Big Game and Furbearers), Division of Fish and Game, Department of Natural Resources, State of Utah, Salt Lake City; A. T. Bleak, Range Scientist, Crops Research Laboratory, Agricultural Research Service, Utah State University, Logan; and Lamar R. Mason, Range Conservationist, USDA Soil Conservation Service, Salt Lake City.

Most of the information on individual protected areas was furnished by rangers and other staff members on the National Forest and Bureau of Land Management districts and staff members of the Division of Fish and Game, Utah Department of Natural Resources.

The author, who joined the Station in 1958, is Plant Ecologist and Leader of the Mountain Herbland, Brush, and Aspen Ranges Research Work Unit and is stationed in Logan at the Forestry Sciences Laboratory, maintained in cooperation with Utah State University. He was formerly stationed at Provo and at the U.S. Sheep Station Experimental Range in Dubois, Idaho. He received the degrees of bachelor and master of science in range management from the University of Wyoming and a doctoral degree in plant ecology from Rutgers University. Beginning in July 1969, he took a year's leave of absence to serve as a Senior Research Fellow with the New Zealand National Research Advisory Council assigned to the New Zealand Forest Service's Forest and Range Experiment Station at Rangiora.

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INTRODUCTION

Exclosures, natural areas, and other types of areas that have received either little or no use by domestic livestock have long been used as reference areas by range managers and scientists. The importance of exclosures in range management was discussed by Williams (1962) and a summary of the importance of natural areas in the evaluation of the grazing resources of North America was presented by Anderson (1966).

The need for a listing of exclosures and natural areas in any specific area has been recognized. For the land manager, knowledge of an existing exclosure may make erection of additional exclosures unnecessary. For the research worker, such a list may provide locations of areas relatively undisturbed by domestic livestock for ecological studies.

A list of all livestock and big game exclosures in Wyoming was published by Williams (1963). Young (1958) prepared a list of 36 big game exclosures in Utah but the list was not intended to be a complete inventory, did not include livestock exclosures or natural areas, and has not been updated.

Because of the need for knowledge about exclosures and natural areas, the American Society of Range Management initiated a "Reference Area" program. Included among this program's objectives is the compilation of a comprehensive list of existing exclosures and natural areas on rangelands in North America. Anderson (1966) described the goals of this program.

The list presented here is part of the "Reference Area" program and it includes all known fenced areas in Utah protected from grazing by either livestock or big game as well as larger "natural areas" that are thought to have received little or no use by domestic livestock because of natural barriers or inaccessibility. In addition, some watershed basins along the Wasatch front from which grazing has been excluded for many years are also included.

The exclosures and natural areas are grouped under the agency which administers or controls the land on which they occur and are further subdivided under districts in the case of the National Forests and Bureau of Land Management. Where an agency other than the land managing agency was involved in the construction, maintenance, or record-keeping, the cooperating agency is indicated in parentheses by the following abbreviations after the name of the exclosure:

ARS: Agricultural Research Service
IF&RES: Intermountain Forest and Range Experiment Station
(USDA Forest Service)
SCS: Soil Conservation Service
UF&G: Utah Division of Fish and Game
UofU: University of Utah
USU: Utah State University

Information about the same exclosure reported by more than two agencies (usually the Utah Division of Fish and Game and another agency) was merged as accurately as possible, although conflicting information was sometimes encountered. If a conflict in name occurred, both names are given. Conflicts about size, date of establishment, location, etc., were resolved by contacting the agencies involved or by using the information thought to be most accurate. However, some errors undoubtedly exist in the list and corrections will be welcomed.

Information for each exclosure or natural area is abstracted using the following sequence:

- Numbers are merely used for indexing purposes (natural areas are indicated by an asterisk to the left of the number and a complete listing of the numbers of all natural areas is included in the index by date of establishment)
- Name of exclosure
- Legal description (quarter section, section, township, range)
- County
- Elevation
- Date established
- Vegetation type or major species
- Number of parts and size of each
- Type of animal excluded
- If vegetation in an exclosure has been sampled, this is indicated by a "V." If photographs have been taken of the exclosure this is indicated by a "P."
- Information about some individual exclosures or natural areas has been published in theses at universities and in scientific journals. References to these publications appear in parentheses at the end of the abstracts where appropriate.

The 529 exclosures and natural areas are numbered consecutively and indexes by county, date of establishment, elevation, types of animals excluded, and vegetation type or species present are presented at the end.

FUTURE STUDIES AND ADDITIONAL EXCLOSURES

Those who wish to study any of the exclosures listed should obtain permission from the land management agency responsible for the exclosure and also any other cooperating agency indicated before studies or sampling are initiated inside or in the immediate vicinity of the exclosure. This will assure that new studies do not conflict with or possibly destroy the value of any ongoing research or administrative studies.

Anyone having knowledge of additional natural areas, fenced study plots, or exclosures is urged to contact the author or some other representative of the Utah Section of the American Society of Range Management. When new exclosures are built they should also be reported in a similar manner (see fig. 1). Likewise, the destruction of existing exclosures should be reported. If enough corrections and additional information are received in the next 5 years, a supplement to this list may be issued.

The forms supplied for each exclosure (fig. 1) contained more information than is included in each abstract. These forms and maps of each ranger district, etc., with the location of the exclosures marked, are now filed in the American Society of Range Management Depository Library at Utah State University. Permission to examine the records should be obtained from the Chairman of the Range Science Department.

INVENTORY OF ENCLOSURES AND NATURAL AREAS IN UTAH
Research Committee, Utah Section, American Society of Range Management

NAME OF ENCLOSURE: _____

LOCATION: Quarter section _____, Section _____, Township _____, Range _____, County _____
Ownership of Land _____

ALTITUDE: _____ EXPOSURE: _____ SLOPE (%) _____

GENERAL DESCRIPTION OF AREA: _____

DATE ESTABLISHED: _____

Subsequent Alterations: _____

SIZE AND DIMENSIONS: _____

TYPE OF ANIMALS EXCLUDED: _____

TYPE AND HEIGHT OF FENCE: _____ In Good Repair? _____

VEGETATION TYPE AND/OR MAJOR SPECIES: _____

Cultural treatments (seeding, spraying, etc.) if any: _____

VEGETATION SAMPLING:

Has vegetation been sampled in enclosure? _____ On grazed range outside? _____

If so, when, and by what methods? _____

Where are records located? _____

PHOTOGRAPHS: Have photographs been taken of the Enclosure? _____ Grazed range? _____

If so, when? _____

Black and White _____ Color transparency _____

Where are photos or negatives filed? _____

GEOLOGICAL FORMATION: _____ SOIL TYPE: _____

Soil Depth: _____ Has profile been described? _____

GENERAL COMMENTS: _____

REPORTED BY: _____ Title: _____ Date: _____

Figure 1.--Example of form used to report enclosure information.

ASHLEY NATIONAL FOREST

Altonah District

1. Jackson Park: SE1/4, sec. 26, T. 3 N., R. 4 W.; Duchesne; 10,700'; dry meadow; 16' X 16'; cattle; P.
2. Lake Ford Canyon: SW1/4, sec. 34, T. 2 N., R. 5 W.; Duchesne; 7,600'; sagebrush; 16' X 16'; cattle.
3. Lake Fork Mountain - Bear Park: NW1/8, sec. 13, T. 2 N., R. 5 W.; Duchesne; 10,500'; grass; 16' X 16'; cattle.
4. Lower Yellowstone: SW1/4, sec. 33, T. 2 N., R. 4 W.; Duchesne; 7,900'; 1951; sagebrush (sprayed), seeded grass (smooth brome and crested wheatgrass); 3 X 3 chains; cattle.
5. Miners Gulch: NE1/4, sec. 36, T. 2 N., R. 7 W.; Duchesne; 7,500'; sagebrush; 16' X 16'; sheep and cattle.
6. Ottosen Basin: NW1/4, sec. 6, T. 3 N., R. 6 W.; Duchesne; 10,800'; meadow; 16' X 16'; sheep.
7. Power Plant, Yellowstone: NW1/4, sec. 27, T. 2 N., R. 4 W.; Duchesne, 7,800'; sagebrush (sprayed), grass; 16' X 16'; cattle.
8. Yellowstone - Swift Creek: SE1/4, sec. 4, T. 2 N., R. 4 W.; Duchesne; 8,100'; 1950; sagebrush; 3 X 3 chains; cattle.

Duchesne District

9. Anthro Mountain Pilot Planting: SW1/4, sec. 14, T. 6 S., R. 5 W.; Duchesne; 8,100'; 1955; sagebrush, seeded grass (wheatgrasses); 1 acre; cattle; V.
10. Cottonwood Ridge Pilot Planting Plot: SE1/4, sec. 17, T. 6 S., R. 6 W.; Duchesne; 8,800'; 1956; sagebrush, seeded grass (wheatgrasses, smooth brome); 1 acre; cattle; V; P.
11. Sowers Canyon Experimental Reseeding: N1/2, sec. 31, T. 6 S., R. 6 W.; Duchesne; 7,800'; 1958; seeded grass (smooth brome, wheatgrasses); rabbit-brush; 40 acres; cattle; V; P.
12. Timber Canyon: NW1/4, sec. 20, T. 5 S., R. 9 W.; Duchesne; 7,800'; 1943; sagebrush; 1/2 acre; cattle, sheep.
13. Trail Hollow Pilot Planting: NE1/4, sec. 33, T. 2 N., R. 9 W.; Wasatch; 9,500'; 1955; sagebrush, seeded grass (wheatgrasses, smooth brome, mountain brome); 1 acre; sheep; V.

Manila District

14. Death Valley Game (UF&G): NE1/4, sec. 24, T. 2 N., R. 19 E.; Daggett; 7,800'; 1951; sagebrush, mountain brush; 100 sq. ft.; deer, cattle; V; P.
15. Dowd's Hole: Sec. 30, T. 2 N., R. 20 E.; Daggett; 7,700'; 1922; sagebrush, bluegrass; 1/10 acre; sheep, cattle; V.

ASHLEY NATIONAL FOREST

Manila District

16. Dowd Mountain Game (UF&G): Sec. 24, T. 2 N., R. 19 E.; Daggett; 8,000'; 1950; sagebrush, mountain brush; 1/4 acre; sheep; V.
17. Dutch John Game (UF&G): Sec. 4, T. 2 N., R. 22 E.; Daggett; 6,400'; 1959; mountain mahogany; in 2 parts:
 - a. 1 acre; cattle; V; P;
 - b. 1 acre; cattle; deer; V; P.
18. Hickerson Park: Sec. 19, T. 2 N., R. 18 E.; Daggett; 9,000'; 1922; meadow; 20' X 20'; cattle, horses; V.
19. Long Park: Sec. 14, T. 2 N., R. 18 E.; Daggett; 8,500'; 1923; sagebrush, bluegrass; 16' X 16'; cattle, horses; V.
20. Meadow Park: Sec. 2, T. 1 N., R. 20 E.; Daggett; 8,000'; 1929; sagebrush; 1/10 acre; sheep, goats; V.
21. Sheep Creek Park: Sec. 36, T. 2 N., R. 18 E.; Daggett; 8,600'; 1924; sagebrush, bluegrass; 1/10 acre; cattle, horses; V.

Roosevelt District

22. Bennion Park Study Plot: SE1/4, sec. 11, T. 3 N., R. 2 W.; Duchesne; 10,000'; 1923; grass; 16' X 16'; cattle, sheep.
23. Farm Creek Proper Use: NE1/4, sec. 15, T. 2 N., R. 1 W.; Duchesne; 8,000'; 1956; sagebrush (sprayed), grass; 1 acre; cattle; V; P.
24. Farm Creek Study Plot: NW1/4, sec. 23, T. 2 N., R. 1 W.; Uintah; 7,000'; 1922; seeded grass (crested wheatgrass, smooth brome); 16' X 16'; cattle, sheep.
25. Kidney Lake: NE1/4, sec. 28, T. 5 N., R. 3 W.; Duchesne; 12,000'; 1956; alpine grass; 1 acre; sheep; V; P.
26. Lake Mountain Study Plot (UF&G): NW1/4, sec. 32, T. 2 S., R. 19 E.; Uintah; 9,000'; 1925; aspen, sagebrush; 18' X 18'; cattle; V.
27. Mosby Canyon Study Plot: SE1/4, sec. 31, T. 2 S., R. 19 E.; Uintah; 8,200'; 1922; sagebrush; 16' X 16'; cattle; V.
28. Mosby Face Reseed Plot (Lake Mtn. Game)(UF&G): SW1/4, sec. 32, T. 2 S., R. 19 E.; Uintah; 9,000'; 1961; aspen; in 3 parts:
 - a. 2-1/2 acres; cattle; V; P;
 - b. 2-1/2 acres; cattle, elk, and deer; V; P;
 - c. 6/10 acre; cattle; P; (established in 1968).
29. Mosby Mountain Game (UF&G): SW1/4, sec. 11, T. 3 S., R. 18 E.; Uintah; 8,000'; 1959; mixed shrub; in 2 parts:
 - a. 2-1/2 acres; cattle; V; P;
 - b. 2-1/2 acres; cattle, elk, and deer; V; P.
30. Mosby Mountain Study Plot: SW1/4, sec. 24, T. 3 S., R. 18 E.; Uintah, 7,500'; 1923; sagebrush; 16' X 16'; cattle, sheep.

ASHLEY NATIONAL FOREST

Roosevelt District

31. Pole Creek Study Plot: SE1/4, sec. 34, T. 3 N., R. 2 W.; Duchesne; 1923; sagebrush; 16' X 16'; cattle, sheep; V.
32. Summit Park Study Plot: SW1/4, sec. 1, T. 3 N., R. 1 W.; Uintah; 10,500'; 1923; grass; 16' X 16'; cattle, sheep.

Vernal District

33. Brush Creek Mountain: Sec. 12, T. 2 S., R. 21 E.; Uintah; 8,100'; 1939; sagebrush; cattle; V; P.
34. Diamond Mountain: Sec. 4, T. 2 S., R. 22 E.; Uintah; 8,000'; 1952; aspen; in 2 parts:
 - a. 1 acre; cattle; V; P;
 - b. 1 acre; cattle, deer, elk; V; P.
35. East Brush Creek (UF&G): NW1/4, sec. 9, T. 2 S., R. 22 E.; Uintah; 7,800'; 1962; sagebrush, mountain mahogany; in 2 parts:
 - a. 2-1/2 acres; cattle; V; P;
 - b. 2-1/2 acres; cattle, deer, elk; V; P.
36. East McKee (Bowden Draw): Sec. 29, T. 1 N., R. 22 E.; Daggett; 8,300'; 1939; sagebrush; 1 acre; sheep; V.
37. Leidy Peak: SW1/4, sec. 31, T. 1 N., R. 19 E.; Uintah; 10,800'; 1957; alpine grass; 5 acres; sheep; V.
38. Pine Hollow Administrative Study: Sec. 3, T. 2 S., R. 21 E.; Uintah; 8,300'; 1965; scrub aspen (sprayed), sagebrush; in 2 parts:
 - a. 2 acres; cattle; V; P;
 - b. 2 acres; cattle, deer, elk; V; P.
39. Taylor Mountain (UF&G): SW1/4, sec. 20, T. 2 S., R. 21 E.; Uintah; 7,700'; 1962; sagebrush, mountain mahogany; in 2 parts:
 - a. 2-1/2 acres; cattle; V; P;
 - b. 2-1/2 acres; cattle, elk, deer; V; P.
40. West Brush Creek (UF&G): SE1/4, sec. 2, T. 2 S., R. 21 E.; Uintah; 8,100'; 1962; aspen, sagebrush; in 2 parts:
 - a. 2-1/2 acres; cattle; V; P;
 - b. 2-1/2 acres; cattle, deer, elk; V; P.

Intermountain Forest and Range Experiment Station

- Diamond Mountain Cattle Allotment (Vernal District): Secs. 15, 20, 21, 22, 23, 27, 34; T. 1 S., R. 22 E.; Secs. 1, 2, 3, 4, 11; T. 2 S., R. 22 E.; Uintah; 8,000'; 1959;
- 41-45. 5 exclosures in seeded grass (crested wheatgrass, smooth brome); 33' X 33'; cattle; V; P;
 - 46-48. 3 exclosures in aspen; 33' X 33'; cattle; V; P;
 - 49-55. 7 exclosures in sagebrush; 33' X 33'; cattle; V; P;
 56. 1 exclosure in mountain brush; 33' X 33'; cattle; V; P.

CACHE NATIONAL FOREST

Logan District

57. Mud Flat: NE1/4, sec. 9, T. 12 N., R. 3 E.; Cache; 1955; grass, forb; 6 acres; cattle..
58. Card Canyon (UF&G): SW1/4, sec. 19, T. 12 N., R. 3 E.; Cache; 5,300'; 1946; sagebrush; 1/2 acre; game, livestock; P.
59. Hansen's Draw (UF&G): NE1/4, sec. 29, T. 12 N., R. 2 E.; Cache; 5,000'; 1936; mountain brush; 1/5 acre; game, livestock; P.
60. Pleasant Valley: NE1/4, sec. 34, T. 11 N., R. 3 E.; Cache; 1954; sagebrush (plowed), seeded grass; 2 acres; cattle.

Randolph District

61. Arb's Basin: NW1/4, sec. 15, T. 9 N., R. 4 E.; Rich; 8,500'; 1955; sagebrush (sprayed), seeded grass; 396' X 396'; sheep; V.
62. Elk Valley: NW1/4, sec. 27, T. 12 N., R. 4 E.; Cache; 6,900'; 1955; sagebrush (sprayed), seeded grass; 462' X 462'; cattle; V.
63. Wasatch Ridge: NE1/4, sec. 28, T. 8 N., R. 4 E.; Weber; 8,700'; 1960; sagebrush (sprayed), seeded grass; sheep; V; P.

DIXIE NATIONAL FOREST

Cedar City District

64. Asay Bench (UF&G): SE1/4, sec. 31, T. 37 S., R. 6 W.; Garfield; 7,800'; 1960; bitterbrush, mixed shrub; in 2 parts:
 - a. 2 acres; livestock; P;
 - b. 1 acre; livestock and game; P.
65. Blowhard: NW1/4, sec. 14, T. 37 S., R. 9 W.; Iron; 10,000'; 1925' grass meadow; 34' X 34'; sheep; V.
66. Bowers Flat: SW1/4, sec. 27, T. 37 S., R. 7 W.; Garfield; 8,100'; 1938; open grass in ponderosa pine; 1 acre; sheep.
67. Bowery: SW1/4, sec. 9, T. 35 S., R. 8 W.; Iron; 7,800'; 1952; sagebrush; 1 acre; cattle; V; P.
68. Burrows Flat: NW1/4, sec. 26, T. 37 S., R. 7 W.; Garfield; 8,000'; 1909; ponderosa pine; grass; 5 acres; sheep; V; P.
69. Long Valley: SW1/4, sec. 12, T. 37 S., R. 8 W.; Iron; 10,000'; 1960; seeded grass (smooth brome, wheatgrasses, Kentucky bluegrass); 6.5 acres; sheep; V; P.
70. Midway: NW1/4, sec. 25, T. 37 S., R. 9 W.; Iron; 9,300'; 1925; grass meadow; 34' X 34'; sheep; V; P.
71. Sage Valley: NW1/4, sec. 30, T. 29 S., R. 8 W.; Iron; 9,600'; 1962; silver sagebrush, seeded grass; 5 acres; sheep.
72. Six Lakes: SE1/4, sec. 8, T. 36 S., R. 9 W.; Iron; 9,700'; 1925; aspen; 12 X 16 rods, increased to 1.2 acres in 1962; sheep and cattle; V; P.

DIXIE NATIONAL FOREST

Cedar City District

73. Tippetts Valley: SW1/4, sec. 23, T. 37 S., R. 8 W.; Iron; 9,000'; 1952; aspen; 1 acre; cattle; P.
74. Strawberry Valley: NE1/4, sec. 31, T. 38 S., R. 7 W.; Kane; 8,000'; 1952; grass; 1 acre; cattle; V; P.
75. Uinta Flat: NW1/4, sec. 1, T. 38 S., R. 7 W.; Garfield; 7,900'; 1960; ponderosa pine, seeded grass; 5 acres; sheep; V; P.
76. Webster Flat (UF&G): SE1/4, sec. 30, T. 37 S., R. 9 W.; Iron; 9,200'; 1965; aspen; in 2 parts:
 - a. 400' X 700'; sheep and cattle; V; P;
 - b. 600' X 900'; sheep, cattle, and deer; V; P.

Circleville District

77. Coyote Hollow: SW1/4, sec. 21, T. 32 S., R. 1 E.; Garfield; 9,500'; seeded grass (crested wheatgrass); 10 acres; cattle; V; P.
78. Riddle Swale (UF&G): NW1/4, sec. 19, T. 33 S., R. 1 W.; Garfield; 7,800'; 1962; black sagebrush, mixed shrub, partially reseeded to intermediate wheatgrass; in 2 parts:
 - a. 1 acre; cattle; V; P;
 - b. 2 acres; cattle and deer; V; P.
79. Woodchuck (UF&G): SW1/4, sec. 28, T. 31 S., R. 2-1/2 W.; Garfield; 9,000'; 1947; sagebrush, mixed shrub with scattered aspen; in 2 parts:
 - a. 1 acre; cattle; V; P;
 - b. 1 acre; cattle and deer; V; P.

Enterprise District

80. Cave: NW1/4, sec. 10, T. 38 S., R. 18 W.; Washington; 6,500'; 1920; mixed shrub; livestock; V; P.
81. Colie Flat (UF&G): SW1/4, sec. 2, T. 38 S., R. 19 W.; Washington; 6,700'; 1950; mountain brush; in 2 parts:
 - a. 1 acre; cattle; V; P;
 - b. 1 acre; cattle and deer; V; P.
82. General Stream Road (UF&G): Sec. 22, T. 39 S., R. 17 W.; Washington; 4,900'; pinyon-juniper, blackbrush; 5 acres; cattle.
83. Iron Peg (UF&G): Sec. 36, T. 37 S., R. 15 W.; Iron; 6,000'; 1954; mixed shrub; in 2 parts:
 - a. 1 acre; livestock;
 - b. 1 acre; livestock and deer; V; P.
84. Jessie Tie Wash: SE1/4, sec. 30, T. 36 S., R. 19 W.; Washington; 5,500'; 1946; sagebrush, seeded grass; 5 acres; cattle (some portions rabbit tight); V; P. (See Cox 1965).
85. Pine Creek: NE1/4, sec. 1, T. 38 S., R. 19 W.; Washington; 1920's or early 1930's; seeded grass (crested wheatgrass, smooth brome); 5 acres; cattle.

DIXIE NATIONAL FOREST

Enterprise District

86. Racer (Pilot Mountain) (UF&G): NW1/4, sec. 24, T. 38 S., R. 18 W.; Washington; 5,900'; 1933; mountain brush; in 2 parts:
 - a. 1/6 acre; cattle; V; P;
 - b. 1/6 acre; cattle and deer; V; P.
87. Richie Flat (UF&G): SW1/4, sec. 30, T. 37 S., R. 14 W.; Iron; 6,000'; 1956; seeded grass; in 2 parts:
 - a. 1 acre; cattle; V; P;
 - b. 1 acre; cattle, deer, and rodents; V; P.
88. Rock Hole: NE1/4, sec. 9, T. 37 S., R. 19 W.; Washington; 6,000'; 1946; sagebrush (sprayed), seeded grass; 5 acres; cattle and rabbits; V; P.
89. Roundup Flat: SW1/4, sec. 18, T. 37 S., R. 19 W.; Washington; 5,980'; 1930; pinyon-juniper, sagebrush; 300 sq. ft.; cattle; V; P.
90. Water Canyon: NE1/4, sec. 2, T. 38 S., R. 19 W.; Washington; 7,500'; 1932; mixed shrub; 10 X 20 rods; cattle.

Escalante District

91. Allen Canyon: NE1/4, sec. 30, T. 35 S., R. 1 E.; Garfield; 7,600'; 1962; oak, mixed shrub; 1 acre; livestock and deer; V; P.
92. Davis Flat: SE1/4, sec. 19, T. 32 S., R. 2 E.; Garfield; 10,000'; 1952; seeded grass; 151' X 120'; livestock.
93. Griffin Top Pilot Plot: NW1/4, sec. 2, T. 34 S., R. 1 W.; Garfield; 10,500'; 1962; seeded grass (orchardgrass, smooth brome); 6.3 acres; livestock; V; P.
94. Middle Deer Creek: SW1/4, sec. 19, T. 32 S., R. 5 E.; Garfield; 9,000'; 1944; grass (seeded wheatgrasses on half); 1/2 acre; livestock.
95. North Creek: Sec. 19, T. 33, R. 1 E.; Garfield; 1940; seeded grass (smooth brome) 1 acre; livestock.

Panguitch Lake District

96. Black Lava (Blackrock) (UF&G): NE1/4, sec. 29, T. 36 S., R. 7 W.; Garfield; 7,000'; 1961; ponderosa pine, bitterbrush; 120' X 180'; livestock and deer.
97. Blowup Deer (UF&G): NE1/4, sec. 19, T. 34 S., R. 7 W.; Iron; 7,500'; 1930 (enlarged in 1961); ponderosa pine, oak, mountain brush; in 2 parts:
 - a. 100' X 100'; cattle; P;
 - b. 90' X 90'; cattle and deer; P.
98. Little Valleys (Corral Hollow) (UF&G): SE1/4, sec. 26, T. 34 S., R. 7 W.; Iron; 8,000'; 1930-1935; sagebrush, bitterbrush; 120' X 120'; cattle and sheep; P.
99. Lower West Pass (Pass Enclosure #2) (UF&G): NW1/4, sec. 7, T. 36 S., R. 6 W.; Garfield; 7,000'; 1952; sagebrush, seeded grass (crested wheatgrass); 120' X 320'; sheep and cattle; V; P.

DIXIE NATIONAL FOREST

Panguitch Lake District

100. Panguitch Lake (Haycock Creek) (UF&G): SW1/4, sec. 27, T. 35 S., R. 7 W.; Garfield; 8,200'; 1950; sagebrush, seeded grass (crested wheatgrass); 360' X 360'; cattle and sheep.
101. Upper West Pass (Pass Exclosure #1) (UF&G): NW1/4, sec. 1, T. 36 S., R. 7 W.; Garfield; 7,200'; 1952; sagebrush, seeded grass (crested wheatgrass); 200' X 200'; sheep and cattle; V; P.

Pine Valley District

102. Browse: NE1/4, sec. 19, T. 39 S., R. 13 W.; Washington; 6,100'; 1921, 1933; oak, mountain brush; 179 acres and three 1/3-acre plots within (not in good repair); livestock and deer.
103. Grass Valley (UF&G): NE1/4, sec. 25, T. 38 S., R. 15 W.; Washington; 7,100'; 1942; pinyon-juniper, sagebrush, mountain brush; in 2 parts:
a. 1-1/6 acres, livestock;
b. 1-1/6 acres, livestock and deer.
104. Pine Valley (UF&G): SW1/4, sec. 20, T. 39 S., R. 14 W.; Washington; 6,700'; 1935; sagebrush, mountain brush; in 2 parts:
a. 1/2 acre, livestock; V; P;
b. 1/2 acre, livestock and big game; V; P.
105. Truman Bench (UF&G): NE1/4, sec. 12, T. 40 S., R. 16 W.; Washington; 5,900'; 1939; pinyon-juniper, sagebrush, mountain brush; 1-1/3 acres; big game.

Powell District

106. Center Creek (Hunt Creek) (UF&G): NE1/4, sec. 21, T. 34 S., R. 3 W.; Garfield; 8,000'; 1961; sagebrush (big and low), blue grama; in 2 parts:
a. 1 acre; cattle; V; P;
b. 1 acre; cattle and deer; V; P.
107. Cougar Hollow (UF&G): SW1/4, sec. 5, T. 39 S., R. 4 W.; Kane; 8,500'; 1961; aspen; in 2 parts:
a. 1 acre; cattle; V; P;
b. 1 acre; cattle and deer; V; P.
108. Sheep Creek (UF&G): SE1/4, sec. 30, T. 37 S., R. 3 W.; Garfield; 7,000'; 1960; seeded grasses and shrubs in pinyon-juniper (railed); in 3 parts:
a. 1 acre; cattle;
b. 1 acre; cattle and deer;
c. 1 acre; cattle, deer, and rabbits.

Teasdale District

109. Antelope Springs: Sec. 22, T. 31 S., R. 1 E.; Garfield; 9,000'; 1929; sagebrush; 24' X 24'; sheep; V.
110. Bluebell Knoll: Sec. 31, T. 30 S., R. 4 E.; Wayne; 11,120'; 1950; sheep fescue and seeded grass; 5-1/2 acres; sheep; V.

DIXIE NATIONAL FOREST

Teasdale District

111. Boulder Crossing: Sec. 4, T. 30 S., R. 4 E.; Wayne; 8,500'; 1923; sagebrush; 24' X 24' enlarged to 1 acre in 1957; cattle; V; P.
112. Pelham Draw: Sec. 17, T. 31 S., R. 2 E.; Garfield; 9,000'; 1927; sagebrush; 1 acre; cattle; V; P.
113. Pot Holes: Sec. 22, T. 30 S., R. 3 E.; Wayne; 8,000'; 1929; sagebrush; 1 acre; livestock; V.
114. Raft Lake: Sec. 32, T. 30 S., R. 4 E.; Wayne; 11,000'; 1924; grass; 16' X 16'; sheep; V.
115. Salt Lake: Sec. 36, T. 31 S., R. 5 E.; Garfield; 8,300'; 1925; grass; 16' X 16'; cattle; V.
116. Steep Creek: Sec. 16, T. 32 S., R. 5 E., Garfield; 8,800'; 1925; mixed shrub, grass; 16' X 16' enlarged to 1 acre in 1967; cattle; V; P.

FISHLAKE NATIONAL FOREST

Beaver District

117. Baker Canyon (UF&G): Sec. 16, T. 29 S., R. 6 W.; Beaver; 7,200'; 1932 (enlarged in 1963); rabbitbrush, sagebrush, seeded grass (crested wheatgrass); 2-1/2 X 1 chain; cattle; P.
118. Bentenson Flat: Sec. 1, T. 30 S., R. 5 W.; Beaver; 9,500'; 1954 and 1958; seeded grass (smooth and mountain brome); 2-1/2 chains X 2-1/2 chains (2 plots); cattle; V; P.
119. Bentenson Flat Burn Aspen Study (UF&G, USU): SW1/4, sec. 30, T. 29 S., R. 4 W.; Beaver; 10,000'; 1961; conifer, aspen (burned in 1957); 42 acres; cattle; V.
120. Big Flat (UF&G): Sec. 19, T. 29 S., R. 4 W.; Beaver; 10,000'; 1950; seeded grass (smooth and mountain brome); in 2 parts:
 - a. 2-1/2 X 2-1/2 chains; cattle; V; P;
 - b. 2-1/2 X 2-1/2 chains; cattle and deer; P.
121. Birch Creek (Pole Mountain) (UF&G): Sec. 25, T. 30 S., R. 5 W.; Piute; 7,800'; 1952; sagebrush, bitterbrush, mountain mahogany; in 2 parts:
 - a. 2-1/2 X 2-1/2 chains; cattle; P;
 - b. 2-1/2 X 2-1/2 chains; cattle and deer; P.
122. Grindstone (UF&G) (See front cover); Sec. 29, T. 29 S., R. 4 W.; Piute; 9,000'; 1934; aspen (partly cut); in 2 parts:
 - a. 100 X 200 ft.; cattle; V; P;
 - b. 100 X 200 ft.; cattle and deer; V; P.
123. Merchant Valley (UF&G): Sec. 3, T. 29 S., R. 5 W.; Beaver; 8,700'; 1932; aspen; in 2 parts:
 - a. 1/5 acre; deer;
 - b. 1/5 acre; livestock and deer.

FISHLAKE NATIONAL FOREST

Beaver District

124. Timid Springs: Sec. 18, T. 29 S., R. 4 W.; Piute; 10,000'; 1964; spruce-fir (cut over), aspen; in 2 parts:
a. 1-1/4 X 2-1/2 chains; cattle; P;
b. 1-1/4 X 2-1/2 chains; deer and cattle; P.

Fillmore District

125. Oak Creek Canyon (UF&G): Sec. 8, T. 17 S., R. 3 W.; Millard; 6,800'; 1952; sagebrush, mountain brush; in 2 parts:
a. 1-1/2 acres; deer;
b. 1-1/2 acres; cattle and deer.
126. North Spring: Sec. 18, T. 20 S., R. 2-1/2 W.; Millard; no records.
127. Robins Valley: Sec. 25, T. 20 S., R. 3-1/2 W.; Millard; no records.

Fishlake District

128. Cedarless Flat: SW1/4, sec. 28, T. 26 S., R. 3 E.; Sevier; 8,400'; 1946; seeded grass (crested wheatgrass); 1 acre; cattle; V. (Probably will be discontinued.)
129. Crevice Spring: NE1/4, sec. 25, T. 26 S., R. 2 E.; Sevier; 8,500'; 1946; seeded grass (crested wheatgrass); 1 acre; cattle; V.
130. Hancock Flat - Game Livestock: SE1/4, sec. 11, T. 26 S., R. 1 E.; Sevier; 10,000'; 1962; aspen, conifer; 5 acres; sheep, deer, and elk.
131. Hightop Plateau (Tasha Spring): NW1/4, sec. 30, T. 25 S., R. 2 E.; Sevier; 11,200'; 1959; seeded grass (crested wheatgrass); 5 acres; sheep, deer, and elk.
132. Mt. Terrel: NW1/4, sec. 22, T. 24 S., R. 2 E.; Sevier; 10,000'; Silver sagebrush; 5 acres; cattle. (Probably will be discontinued.)

Kanosh District

133. Big Bench: SE1/4, sec. 9, T. 24 S., R. 4-1/2 W.; Sevier; 8,600'; 1963; sagebrush (sprayed); 10 chains square (10 acres); cattle; V; P.
134. Corn Creek (Kanosh) (IF&RES): NW1/4, sec. 34, T. 23 S., R. 5 W.; Millard; 5,500'; 1931; oak, sagebrush, juniper; 10 acres; cattle; V.
135. Corn Creek Grass Plot: NE1/4, sec. 4, T. 24 S., R. 4-1/2 W.; Millard; 6,200'; 1938; seeded grass (smooth brome); cattle; V; P.
136. Dameron: NW1/4, sec. 5, T. 24 S., R. 5 W.; Millard; 5,500'; 1936; juniper, cliffrose; in 2 parts:
a. 3/4 acre; cattle;
b. 3/4 acre; cattle and big game.

FISHLAKE NATIONAL FOREST

Kanosh District

137. Misery Creek: NW1/4, sec. 19, T. 23 S., R. 4 W.; Millard; 8,800'; 1963; aspen, chokecherry; 1 acre; cattle; P.
138. North Cedars (Mud Flat) (UF&G): SW1/4, sec. 12, T. 26 S., R. 5 W.; Sevier; 7,000'; 1963; pinyon-juniper (chained), seeded grass; in 2 parts:
a. 9 acres; cattle; V; P;
b. 1 acre; cattle and deer; V; P;
(30' X 30' rodent enclosure in each part).
139. Rockwood: NE1/4, sec. 34, T. 24 S., R. 4-1/2 W.; Sevier; 8,850'; 1935; aspen; 1 acre; deer and cattle. (Probably will be discontinued.)
140. West Corn Creek: NE1/4, sec. 7, T. 23 S., R. 4 W.; Millard; 9,000'; 1958; aspen, seeded grass; 1 acre; cattle; P.

Loa District

141. Jahu Flat: NW1/4, sec. 17, T. 27 S.; R. 4 E.; Wayne; 9,300'; 1947; seeded grass; 1 acre; cattle.
142. Sheep Valley Study Plot: NE1/4, sec. 22, T. 24 S.; R. 3 E.; Sevier; 10,000'; 1958; seeded grass; 10 acres; cattle; V.
143. Tidwell Revegetation Pilot Plot: NW1/4, sec. 4, T. 26 S., R. 4 E.; Sevier; 8,800'; 1962; sagebrush (sprayed) seeded grass; 25 acres; cattle; V; P.

Monroe District

144. Big Flat: NE1/4, sec. 19, T. 27 S., R. 2 W.; Piute; 9,400'; 1950; sagebrush, seeded grass; 100' X 60'; cattle and sheep.
145. Glenwood Mountain: NE1/4, sec. 30, T. 24 S., R. 1 W.; Sevier; 7,600'; 1957; sagebrush (sprayed), grass; 150' X 150'; cattle and sheep; V; P.
146. John Willis: NW1/4, sec. 33, T. 27 S., R. 2 W.; Piute; 9,250'; 1948; sage-200' X 100'; sheep and cattle; P.
147. Smith Canyon (Willow Creek Game): SW1/4, sec. 17, T. 27 S., R. 2-1/2 W.; Piute; 7,750'; sagebrush, bluebunch wheatgrass; 2 acres; sheep and cattle.
148. South Forshea Mountain: NE1/4, sec. 25, T. 29 S., R. 2-1/2 W.; Piute; 8,900'; 1949; sagebrush (burned and plowed), seeded grass; 2 exclosures, 40' X 60' each; cattle; P. (Probably will be discontinued.)
149. Washburn Reservoir: NW1/4, sec. 28, T. 25 S., R. 2 W.; Sevier; 9,000'; 1966; aspen, seeded grass; 3 to 4 acres; sheep; V; P.

Salina District

150. Black Mountain (UF&G): Sec. 20, T. 22 S., R. 1 E.; Sevier; 7,500'; 1939; pinyon-juniper; in 2 parts:
a. 1 acre; cattle;
b. 1 acre; cattle and deer.

FISHLAKE NATIONAL FOREST

Salina District

151. Duncan Mountain Experimental Plot (UF&G): NE1/4, sec. 6, T. 22 S., R. 5 E.; Sevier; 8,300'; 1962; seeded grass (crested wheatgrass); 70 acres; cattle; V; P.
152. Mud Spring (UF&G): Sec. 27, T. 22 S., R. 1 E.; Sevier; 7,200'; 1940; seeded grass (crested wheatgrass); in 2 parts:
 - a. 1 acre; cattle;
 - b. 1 acre; deer and cattle.
153. Prowse Spring Ripping Study: SW1/4, sec. 29, T. 22 S., R. 1 E.; Sevier; 7,200'; 1964; seeded grass (crested wheatgrass); 10 acres; cattle; V; P.
154. South Water Hollow Elk (UF&G): SW1/4, sec. 2, T. 23 S., R. 4 E.; Sevier; 8,300'; 1961; sagebrush, mahogany, bitterbrush, oak; 200' X 200'; cattle, deer, elk, rabbit; V; P.
155. Willow Creek Plot (Truman's Pasture) (UF&G): NE1/4, sec. 12, T. 21 S., R. 2 E.; Sevier; 9,200'; 1965; seeded grass (intermediate wheatgrass); 112' X 170'; cattle; V; P.

MANTI-LA SAL NATIONAL FOREST

Castle Dale District

156. East Mountain Gap (Pine Spring) (UF&G): SW1/4, sec. 6, T. 17 S., R. 7 E.; Emery; 10,000'; 1962; grass; 1 acre; cattle; V.
157. Grimes Wash (UF&G): NW1/4, sec. 22, T. 17 S., R. 7 E.; Emery; 8,500'; 1962; seeded grass (smooth brome, intermediate wheatgrass); 1 acre; cattle; V; P.
158. Little's Creek Wildlife (UF&G): NW1/4, sec. 31, T. 17 S., R. 6 E.; Emery; 1949; sagebrush, mahogany, bitterbrush, pinyon-juniper; in 2 parts:
 - a. 1 acre; livestock; V; P;
 - b. 1 acre; livestock and deer; V; P.
159. McCadden Flats: SE1/4, sec. 1, T. 16 S., R. 7 E.; Emery; 8,700'; 1963; seeded grass (sagebrush sprayed); 1 acre; cattle.
160. McCadden Hollow: NW1/4, sec. 1, T. 16 S., R. 7 E.; Emery; 8,300'; 1963; seeded grass (smooth brome, wheatgrasses); 1 acre; cattle.
161. South Trail Mountain (UF&G): NW1/4, sec. 27, T. 17 S., R. 6 E.; Emery; 8,200' 1962; seeded grass (smooth brome, wheatgrasses); 1 acre; cattle; V; P.
162. South Trail Mountain Wildlife (UF&G): NW1/4, sec. 34, T. 17 S., R. 6 E., Emery; 8,000'; 1962; sagebrush, mountain brush; in 2 parts:
 - a. 1 acre; cattle; V;
 - b. 1 acre; cattle, deer, and elk; V.

Ephraim District

163. Dry Pole: SE1/4, sec. 14, T. 15 S., R. 5 E.; Sanpete; 10,500'; 1964; seeded grass (Timothy, smooth brome, orchardgrass); 1/4 acre; sheep; V.

MANTI-LA SAL NATIONAL FOREST

Ephraim District

164. Pigeon Creek: Sec. 31, T. 16 S., R. 4 E.; Sanpete; 6,100'; 1962; sagebrush, mountain brush; 2 acres; sheep, cattle, deer, horses, and rabbits; V; P.
165. Reeder Canyon: Sec. 32, T. 16 S., R. 5 E.; Sanpete; 11,000'; 1954; grass, forb; 1 acre; sheep and horses; V.

Ferron District

166. Dairy Creek (Ferron Mountain) (UF&G): NW1/4, sec. 34, T. 19-1/2 S., R. 5 E.; Sanpete; 9,800'; 1954; seeded grass; 100' X 100'; cattle; V; P.
167. East Rim Horn Mountain (North Horn Mountain) (UF&G): Sec. 29, T. 18 S., R. 7 E.; Emery; 8,500'; 1954; sagebrush, seeded grass (crested wheatgrass); in 2 parts:
a. 1 acre; cattle; V; P;
b. 1 acre; cattle and deer; V; P.
168. Flagstaff Peak (UF&G): SE1/4, sec. 13, T. 20 S., R. 5 E.; Sanpete; 9,600'; 1952; aspen, seeded grass (smooth brome); 2 acres; cattle; P.
169. South Horn Mountain Big Game Study (UF&G): Sec. 23, T. 19 S., R. 6 E.; Emery; 8,200'; 1963; sagebrush; mahogany, pinyon-juniper; in 2 parts:
a. 6 acres; cattle; V; P;
b. 6 acres; cattle and deer; V; P.
170. Wrigley Flat (UF&G): SW1/4, sec. 26, T. 19 S., R. 5 E.; Sanpete; 9,000'; 1957; sagebrush; 2 acres; cattle and sheep; P.

Manti District

171. Clear Creek Flat Tarweed Study: NW1/4, sec. 29, T. 20 S., R. 3 E.; Sanpete; 9,200'; 1958; seeded grass, tarweed; 3 chains square; livestock.
172. Cottonwood Exclosure: SW1/4, sec. 11, T. 18 S., R. 3 E.; Sanpete; 7,200'; 1927; 20' X 15'; livestock.
173. Green's Hollow Elk (UF&G): NW1/4, sec. 29, T. 20 S., R. 5 E.; Sanpete; 8,100'; 1960; sagebrush, seeded grass (crested wheatgrass); in 2 parts:
a. 1 acre; livestock; V; P;
b. 1 acre; livestock and deer; V; P.
174. Lowery Cove: Sec. 10, T. 18 S., R. 4 E.; Sanpete; 10,000'; 1932; forb, grass; 18' X 24'; livestock.
175. Manti Canyon, Middle Fork: SE1/4, sec. 16, T. 18 S., R. 4 E.; Sanpete; 10,200'; 1930; grass; 20' X 20'; livestock.
176. Manti Canyon, South Fork: NW1/4, sec. 29, T. 18 S., R. 4 E.; Sanpete; 9,000'; 1930; grass, forb; 18' X 23'; livestock.
177. North Fork, Twelve Mile: SE1/4, sec. 24, T. 19 S., R. 3 E.; Sanpete; 9,100'; 1927; thistle, forb, grass; 20' X 35'; livestock.

MANTI-LA SAL NATIONAL FOREST

Manti District

178. North Fork, Twelve Mile: NE1/4, sec. 26, T. 19 S., R. 3 E.; Sanpete; 8,900'; 1927; tarweed, annuals; 20' X 35'; livestock.
179. Sand Ridge, Six Mile Canyon: NE1/4, sec. 35, T. 18 S., R. 3 E.; Sanpete; 8,400'; 1928; annual and perennial forbs; 20' X 35'; livestock.
180. Twelve Mile Deer (UF&G): SW1/4, sec. 32, T. 19 S., R. 3 E.; Sanpete; 6,600'; 1937 and 1945; sagebrush; in 2 parts:
- a. 3-1/2 X 10 chains; livestock; V; P;
 - b. 2-1/2 X 2-1/2 chains; livestock and deer; V; P.

Moab District

181. Amasa's Back (UF&G): SW1/4, sec. 25, T. 27 S., R. 23 E.; San Juan; 7,000'; 1954; serviceberry, mountain mahogany, black sagebrush; in 2 parts:
- a. 1 acre; cattle; V; P;
 - b. 1 acre; cattle and deer; V; P.
182. Brumley Ridge Plot (Lower): SE1/4, sec. 4, T. 27 S., R. 24 E.; San Juan; 9,000'; 1961; aspen; 1 acre; cattle.
183. Brumley Ridge Plot (Upper): SE1/4, sec. 4, T. 27 S., R. 24 E.; San Juan; 9,500'; 1957; aspen; 1 acre; cattle.
184. North Beaver Mesa (UF&G): NE1/4, sec. 9, T. 25 S., R. 25 E.; Grand; 7,600'; 1961; oak, mixed shrub, pinyon-juniper; in 2 parts:
- a. 1 acre; cattle; V;
 - b. 1 acre; cattle and deer; V.

Monticello District

185. Dry Mesa (UF&G): SE1/4, sec. 16, T. 34 S., R. 18 E.; San Juan; 8,160'; 1947; sagebrush, mixed shrub; in 2 parts:
- a. 1 acre; cattle; V; P;
 - b. 1 acre; cattle and deer; V; P.
186. Harts Draw (Lower) (UF&G): NW1/4, sec. 34, T. 32 S., R. 22 E.; San Juan; 6,500'; 1955; sagebrush, pinyon-juniper; in 2 parts:
- a. 1 acre; cattle; V; P;
 - b. 1 acre; cattle and deer; V; P.
187. Joshua Flat: SE1/4, sec. 17, T. 36 S., R. 19 E.; San Juan; 8,500'; 1947; aspen, mixed shrubs, seeded grass; 1 acre; cattle and horses; V; P.
188. Little Notch: NW1/4, sec. 35, T. 35 S., R. 19 E.; San Juan; 8,500'; 1947; ponderosa pine, oak, seeded grass; 1 acre; cattle and horses; V.
189. North Long Point (UF&G): NW1/4, sec. 4, T. 34 S., R. 19 E.; San Juan; 8,400'; 1960; aspen, oak, sagebrush; in 2 parts:
- a. 1 acre; cattle; V; P;
 - b. 1 acre; cattle and deer; V; P.
190. North Sego Flat: SW1/4, sec. 1, T. 34 S., R. 19 E.; San Juan; 8,500'; 1947; oak, snowberry, seeded grass; 1 acre; cattle and horses; V.

MANTI-LA SAL NATIONAL FOREST

Monticello District

191. Peter's Point (UF&G): NE1/4, sec. 1, T. 37 S., R. 22 E.; San Juan; 7,900'; 1960; sagebrush, oak, mixed shrub (seeded grass and shrubs on part); in 2 parts:
a. 2 acres; cattle; V; P;
b. 1 acre; cattle and deer; V; P.
192. Sego Flat: NE1/4, sec. 12, T. 34 S., R. 19 E.; San Juan; 8,500'; 1947; aspen, oak, snowberry, seeded grass; 1 acre; cattle and horses; V; P.

Mount Pleasant District

193. Dairy Fork, Big Game (UF&G): SE1/4, sec. 21, T. 10 S., R. 5 E.; Utah; 6,600'; 1963; sagebrush, oak, and mixed shrub; in 2 parts:
a. 1 acre; cattle; P;
b. 1 acre; cattle and deer (1/4 acre rodent proof); V; P.
194. Lasson Draw Big Game: NW1/4 and SW1/4, sec. 28, T. 11 S., R. 4 E.; Utah; 6,400'; 1960; sagebrush, mixed shrub; 2 acres; livestock and big game; V; P.

Intermountain Forest and Range Experiment Station - Great Basin Experimental Area¹
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195. Aldous White Knoll Log and Block (Ferron District): SW1/4, sec. 10, T. 18 S., R. 5 E.; Sanpete; 8,600'; 1922; grass, forb; 1/4 acre; sheep; V; P.
196. Alpine Cattle Pasture: NW1/4, sec. 35, T. 17 S., R. 4 E.; Sanpete; 9,900'; 1922; grass, forb; 60 acres; sheep; V; P.
197. Aspen Area: NW1/4, sec. 17, T. 17 S., R. 4 E.; Sanpete; 7,990'; 1928; oak, sagebrush, snowberry, and aspen; 11 acres; sheep.
198. Bear Creek (bottom-slope, below ditch) (Ferron District): NE1/4 sec. 2; T. 18 S., R. 4 E.; Sanpete; 10,000'; 1913; grass, forb; 1/4 acre; sheep; V; P.
199. Bear Creek (high-slope) (ARS), above road (Ferron District): NE1/4, sec. 2, T. 18 S., R. 4 E.; Sanpete; 9,000'; 1951; grass, forb; 1/4 acre; sheep; V.
200. Bear Creek (low-slope) (ARS), below road (Ferron District): NE1/4, sec. 2, T. 18 S., R. 4 E.; Sanpete; 9,000'; 1951; grass, forb; 1/4 acre; sheep; V.
201. Bear Creek (mid-slope, below road) (Ferron District): NE1/4, sec. 2, T. 18 S., R. 4 E.; Sanpete; 10,000'; 1913; grass, forb; 1/4 acre; sheep; V; P.
202. Bear Creek (mid-slope) (ARS), above road (Ferron District): NE1/4, sec. 2, T. 18 S., R. 4 E.; Sanpete; 9,000'; 1951; grass, forb; 1/4 acre; sheep; V.
203. Bear Creek Old Smooth Brome, (bottom-slope) (Ferron District), below Madsen ditch: NE1/4, sec. 2, T. 18 S., R. 4 E.; Sanpete; 9,000'; 1914; seeded grass, forb; 1/4 acre; sheep; V.
204. Bedground: SE1/4, sec. 20, T. 17 S., R. 4 E.; Sanpete; 8,800'; 1940; grass, forb; 1 acre; cattle; V.

¹For a description of the area and some of the exclosures, see Ellison 1954.

MANTI-LA SAL NATIONAL FOREST

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205. Birchleaf Mahogany: NE1/4, sec. 18, T. 17 S., R. 4 E.; Sanpete; 7,480'; 1922; oak, mountain mahogany, pinyon-juniper, sagebrush; 1/4 acre; sheep and deer; V; P.
206. Bitterbrush: NW1/4, sec. 18, T. 17 S., R. 4 E.; Sanpete; 7,160'; 1919; oak, sagebrush, pinyon-juniper; 1/4 acre; sheep and deer; V; P.
207. Bluebell: SE1/4, sec. 21, T. 17 S., R. 4 E.; Sanpete; 8,975'; 1922; grass, forb; 1/4 acre; cattle; V; P.
208. Bluebell Runoff: SE1/4, sec. 21, T. 17 S., R. 4 E.; Sanpete; 9,000'; 1935; mixed shrub, grass, forb; 2 acres; sheep; V.
209. Carrying Capacity Pasture: SW1/4, sec. 26, T. 17 S., R. 4 E.; Sanpete; 10,000'; 1912; grass, forb; sheep; V; P.
210. Cattle Pasture (log and block) (inside Alpine Cattle Pasture): NE1/4, sec. 34, T. 17 S., R. 4 E.; Sanpete; 9,900'; 1922; grass, forb; V.
211. Dahl's (north of road): NW1/4, sec. 18, T. 17 S., R. 4 E.; Sanpete; 7,300'; 1957; oak, pinyon-juniper, sagebrush; 2 acres; sheep; V.
212. Dahl's (south of road): NW1/4, sec. 18, T. 17 S., R. 4 E.; Sanpete; 7,300'; 1955; oak, pinyon-juniper, sagebrush; 1-1/2 acres; deer and sheep; V.
213. Dungeon exclosure: NW1/4, sec. 27, T. 17 S., R. 4 E.; Sanpete; 9,410'; 1940; grass, forb; 1/2 acre; sheep; V.
214. Dusterburg Ridge Burn: NW1/4, sec. 8, T. 17 S., R. 4 E.; Sanpete; 8,000'; 1945; mixed shrubs, oak, seeded grasses; 1 acre; sheep and cattle; V; P.
- *215. Elk Knoll Natural Area (Manti District): Secs. 9 and 10, T. 18 S., R. 4 E.; Sanpete; 10,000'; designated as a natural area in 1957--longtime protection from grazing; grass, forb; 40 acres; cattle; V; P. (see Ellison 1954).
216. Erosion Area A: SW1/4, sec. 26; T. 17 S., R. 4 E.; Sanpete; 10,010'; 1912; grass, forb; 11.24 acres; sheep; V; P.
217. Erosion Area B: SW1/4, sec. 26, T. 17 S., R. 4 E.; Sanpete; 10,160'; 1912; seeded grass; 8.97 acres; sheep; V; P.
218. Gopher Study Exclosure: SW1/4, sec. 23, T. 17 S., R. 4 E.; Sanpete; 10,120'; 1941; grass, forb; 4 acres; sheep (pocket gophers controlled on half); V; (see Ellison and Aldous 1952).
- *219. Graveyard Natural Area: NW1/4, sec. 17, T. 17 S., R. 4 E.; Sanpete; 7,900'; oak and juniper; 50 acres; sheep; V.
220. Great Basin Headquarters Station: SE1/4, sec. 20, T. 17 S., R. 4 E.; Sanpete; 8,850'; 1912; aspen, conifer; 80 acres; sheep; V.
221. Left Fork Gully Channel: SE1/4, sec. 22, T. 17 S., R. 4 E.; Sanpete; 10,000'; 1959; grass, forb; 1 acre; sheep; V.

MANTI-LA SAL NATIONAL FOREST

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222. Left Fork Summit (ARS): SW1/4, sec. 23, T. 17 S., R. 4 E.; Sanpete; 10,120'; 1936, enlarged 1946; seeded grass; 4 acres; sheep; V.
223. Lower Horseshoe: SE1/4, sec. 14, T. 17 S., R. 4 E.; Sanpete; 9,875'; 1912; yellow brush, grass, forb; 1/4 acre; sheep; V; P; (see Johnson 1964).
224. Lower Joes Valley (Ferron District) (UF&G): Sec. 31, T. 17 S., R. 6 E.; Emery; 7,150'; 1930; sagebrush, mountain brush; in 2 parts:
a. 4 acres; sheep and cattle; V; P; (this part estab. 1945);
b. 4 acres; sheep, cattle, and deer; V; P.
225. Lower Seely Creek (north side): NW1/4, sec. 32, T. 17 S., R. 5 E.; Sanpete; 8,900'; 1916; aspen; 1/2 acre; sheep; V; P.
226. Lower Seely Creek (south side): NE1/4, sec. 31, T. 17 S., R. 5 E.; Sanpete; 8,900'; 1916; aspen; 1/4 acre; sheep.
227. Lower Thistle Flat (east): SE1/4, sec. 32, T. 17 S., R. 5 E.; Sanpete; 8,600'; 1922; aspen; 1/4 acre; sheep; V; P.
228. Lower Willow Creek (near willow patch on private land): NE1/4, sec. 36, T. 17 S., R. 3 E.; Sanpete; 7,700'; 1933; sagebrush, oak; 1/4 acre; sheep and cattle; V; P.
229. Lyon's (inside Maple Creek exclosure): NE1/4, sec. 18, T. 17 S., R. 4 E.; Sanpete; 7,890'; 1922; oak, snowberry, mahogany, sagebrush; 1/4 acre; sheep and deer; V; P.
230. Major's Flat Deerproof (ARS): NW1/4, sec. 18, T. 17 S., R. 4 E.; Sanpete; 7,100'; 1928; oak, sagebrush, pinyon-juniper; 10 acres; sheep and deer; V.
231. Major's Flat Stockproof (ARS): NW1/4, sec. 18, T. 17 S., R. 4 E.; Sanpete; 7,100'; 1947; oak, sagebrush, pinyon-juniper; 20 acres; sheep; V.
232. Maple Creek: SE1/4, sec. 18, T. 17 S., R. 4 E.; Sanpete; 7,890'; 1928; oak, snowberry, sagebrush; 32 acres; sheep; V; P.
233. Meadows: NE1/4, sec. 34, T. 17 S., R. 4 E.; Sanpete; 9,860'; 1922; grass meadow; 1/4 acre; sheep; V.
234. North Bluebell (above road): SE1/4, sec. 21, T. 17 S., R. 4 E.; Sanpete; 9,000'; 1950; aspen, fir; 1 acre; sheep; V.
235. North Bluebell (below road) ARS: SE1/4, sec. 21, T. 17 S., R. 4 E.; Sanpete; 8,990'; 1950; grass, forb; 1 acre; sheep; V.
236. North Bluebell (moist meadow, below road) ARS: SE1/4, sec. 21, T. 17 S., R. 4 E.; Sanpete; 8,990'; 1950; grass, forb; 1 acre; sheep; V.
237. Oak-sage Runoff: NW1/4, sec. 17, T. 17 S., R. 4 E.; Sanpete; 7,900'; 1934; oak, sagebrush, snowberry; 1-1/2 acres; sheep; V.

MANTI-LA SAL NATIONAL FOREST

Intermountain Forest and Range Experiment Station - Great Basin Experimental Area
(On Ephraim District except as noted otherwise)

238. Philadelphia Flat (ARS): SE1/4, sec. 27, T. 17 S., R. 4 E.; Sanpete; 9,940'; 1954; grass, forb; 1 acre; sheep; V.
239. Philadelphia Flat (log and block): NE1/4, sec. 34, T. 17 S., R. 4 E.; Sanpete; 9,940'; 1913; grass, forb; 1/4 acre; sheep; V; P.
240. Philadelphia Flat (wire) (ARS): NE1/4, sec. 34, T. 17 S., R. 4 E.; Sanpete; 9,940'; 1922; grass, forb; 1 acre; sheep; V.
241. Pigpen Springs: NW1/4, sec. 17, T. 17 S., R. 4 E.; Sanpete; 7,990'; 1948; aspen; 2 acres; sheep; V.
242. Sampson's Left Fork: SE1/4, sec. 15, T. 17 S., R. 4 E.; Sanpete; 10,400'; 1922; seeded grass, forb; 1/4 acre; sheep; V.
243. Seeley Creek Cove (fences now deteriorated): SW1/4, sec. 25, T. 17 S., R. 4 E.; Sanpete; 9,800'; 1914; grass, forb; sheep; V.
244. Seely Creek Dipping Vat (fence in need of repair): NE1/4, sec. 26, T. 17 S., R. 4 E.; Sanpete; 9,000'; 1920; grass, forb; 1/4 acre; sheep; V.
245. Seely Creek (east): NE1/4, sec. 26, T. 17 S., R. 4 E.; Sanpete; 9,000'; 1914; seeded grass (smooth brome); 1/4 acre; sheep; V.
246. Seely Creek (west): NE1/4, sec. 26, T. 17 S., R. 4 E.; Sanpete; 9,000'; 1914; seeded grass (Kentucky bluegrass); 1/4 acre; sheep; V.
247. Snowberry: NW1/4, sec. 17, T. 17 S., R. 4 E.; Sanpete; 8,450'; 1928; aspen, snowberry, sagebrush; 5 acres; sheep and deer; V; P.
248. Tom's Ridge (log and block): NW1/4, sec. 36, T. 17 S., R. 4 E.; Sanpete; 9,600'; 1918; grass, forb; 1/10 acre; sheep; V.
249. Tom's Ridge (wire): NW1/4, sec. 25, T. 17 S., R. 4 E.; Sanpete; 9,600'; 1940; grass, forb; 1/2 acre; sheep; V.
250. Thursby, Dusterburg Ridge: SW1/4, sec. 8, T. 17 S., R. 4 E.; Sanpete; 7,900'; 1921; sagebrush, snowberry; 1/10 acre; sheep and cattle; V.
251. Upper Horseshoe: NE1/4, sec. 14, T. 17 S., R. 4 E.; Sanpete; 9,900'; 1912; grass, forb; 1/4 acre; sheep; V; P; (see Johnson 1964).
252. Upper Seely Creek: NE1/4, sec. 26, T. 17 S., R. 4 E.; Sanpete; 9,800'; 1916; grass, forb; 1/4 acre; sheep; V; P.
253. Upper Willow Creek: SW1/4, sec. 30, T. 17 S., R. 4 E.; Sanpete; 8,100'; 1933; oak, sagebrush, seeded grass; 1/4 acre; sheep and cattle; V.
254. Wagon Road (Ferron District): SW1/4, sec. 9, T. 18 S. R. 5 E.; Sanpete; 8,700'; 1913; aspen, fir; 1/4 acre; sheep; V.
255. West Haystack (log and block): SE1/4, sec. 20, T. 17 S., R. 4 E.; Sanpete; 8,800'; 1950; aspen, fir; 1/4 acre; in 2 parts:
a. 1/8 acre; cattle; V;
b. 1/8 acre; cattle and deer; V.

MANTI-LA SAL NATIONAL FOREST

Intermountain Forest and Range Experiment Station - Great Basin Experimental Area
(On Ephraim District except as noted otherwise)

256. Willow Creek: SW1/4, sec. 19, T. 17 S., R. 4 E.; Sanpete; 7,850'; 1940; aspen; 2 acres; sheep; V.
257. Wiregrass or Oaks: NE1/4, sec. 18, T. 17 S., R. 4 E.; Sanpete; 7,500'; 1928; oak, sagebrush, juniper, ponderosa pine; 5 acres; sheep and deer; V; P.

UINTA NATIONAL FOREST

Heber District

258. Mill Hollow Snow Bank: SE1/4, sec. 28, T. 4 S., R. 7 E.; Wasatch; 9,500'; 1938; depleted grass, forb, annuals; 3 acres; sheep, cattle, horses; V; P.
259. Soapstone Pass: Sec. 28, T. 35, R. 8 E.; Wasatch; 9,000'; 1946; wyethia, forb, tarweed; 1 acre; sheep, cattle, and horses; V; P.
260. Wolf Creek Summit: Sec. 17, T. 4 S., R. 8 E.; Wasatch; 10,000'; 1946; grass, forb; 1 acre; sheep, cattle, horses, V; P.

Nephi District

261. Birch Creek (IF&RES): NW1/4, sec. 21, T. 12 S., R. 1 E.; Juab; 5,240'; 1946; sagebrush, seeded grass and shrubs; 2-1/2 acres; cattle, sheep.
262. Footes Canyon: Sec. 19, T. 12 S., R. 2 E.; Juab; 8,400'; 1962; aspen; 1/12 acre; livestock, elk, and deer; V; P.
263. Four Mile Canyon: NW1/4, sec. 8, T. 14 S., R. 2 E.; Juab; 8,600'; 1965; aspen, seeded grass; 1/10 acre; cattle, deer, and elk.
264. Gardner Canyon: SW1/4, sec. 22, T. 12 S., R. 1 E.; Juab; 6,100'; 1930; mountain mahogany; in 2 parts:
a. 1/2 acre; cattle, and sheep;
b. 1/2 acre; cattle, sheep, deer.
265. Holman Test Plot (UF&G): SE1/4, sec. 34, T. 10 S., R. 2 E.; Utah; 8,400'; 1951; seeded grass; 1 acre; cattle; V.
266. Mud Springs: SW1/4, sec. 15, T. 11 S., R. 2 E.; Utah; 8,900'; 1951; seeded grass; 3 acres; cattle; V; P.
267. Quaking Aspen Unit: Sec. 22, T. 15 S., R. 2 E.; Sanpete; 8,040'; 1950-52; sagebrush, snowberry, seeded grasses; 1 acre; cattle, rabbits; V.
268. Red Creek Flat (UF&G): SE1/4, sec. 10, T. 12 S., R. 2 E.; Juab; 7,280'; 1925 (altered in 1950 and 1954); aspen; in 2 parts:
a. 1 acre; cattle; V; P;
b. 1 acre; cattle and deer; V; P.
269. Swett Shanty Flat (UF&G): SE1/4, sec. 13, T. 10 S., R. 2 E.; Utah; 7,500'; 1952 (1936?); aspen, maple, seeded grass; 1/2 acre; cattle; V; P.
270. Wales Top Spray: SE1/4, sec. 32, T. 15 S., R. 2 E.; Juab; 7,800'; 1959; grass (sagebrush sprayed); 3 acres; cattle; V; P.

UINTA NATIONAL FOREST

Pleasant Grove District

271. Timpanogas (Battle Creek) (UF&G): SW1/4, sec. 26, T. 5 S., R. 2 E.; Utah; 5,400'; 1955; sagebrush, oak; in 2 parts:
a. 1 acre; cattle; V; P;
b. 1 acre; cattle and deer; V; P.

Spanish Fork District

272. Crooked Creek: SW1/4, sec. 24, T. 4 S., R. 12 W.; Wasatch; 7,800'; 1956; sagebrush; 1 acre; cattle, sheep.
273. Diamond Fork (IF&RES): Sec. 31, T. 7 S., R. 6 E.; Utah; 7,500'; 1931; oakbrush; 10 acres; cattle; V.
274. Hobble Creek: NW1/4, sec. 17, T. 8 S., R. 6 E.; Utah; 7,000'; 1949; tall forb; 10 rods square; cattle; V; P.
275. Little Sheep Creek: NE1/4, sec. 26, T. 7 S., R. 5 E.; Utah; 6,800'; 1938; aspen, seeded grass; 5 rods square; cattle; V; P.
276. Lower Tank Hollow (UF&G): NE1/2, sec. 35, T. 9 S., R. 5 E.; Utah; 6,500'; 1949; sagebrush, seeded grass (crested wheatgrass); in 2 parts:
a. 10 X 15 rods; cattle; V; P;
b. 10 X 15 rods; cattle and big game; V; P.
277. Millers Flat: SW1/4, sec. 19, T. 9 S., R. 6 E.; Utah; 7,500'; 1950; sagebrush, seeded grass; 1 acre; cattle.
278. Pump Ridge: SE1/4, sec. 22, T. 7 S., R. 5 E.; Utah; 6,800'; 1952; seeded grass (crested wheatgrass); 15 rods square; cattle; V; P.
279. Tank Hollow, Big Game and Livestock: SE1/4, sec. 26, T. 9 S., R. 5 E.; Utah; 7,000'; 1961; sagebrush, mountain brush, oak; 125 acres; big game, cattle, rabbits; V; P.
280. Tank Hollow Experimental Grass Pilot Study: SW1/4, sec. 35, T. 9 S., R. 5 E.; Utah; 6,000'; 1959; seeded grass; 1/2 acre; cattle; V; P.
281. Upper Tank Hollow Experimental Exclosure (UF&G): NW1/4, sec. 25, T. 9 S., R. 5 E.; Utah; 7,500'; 1951; mountain brush; in 2 parts:
a. 3 acres; cattle; V; P;
b. 2 acres; cattle and deer; V; P.
282. Rays Valley: NW1/4, sec. 17, T. 8 S., R. 6 E.; Utah; 7,000'; 1949; tall forb; 10 rods square; cattle; V; P.

Strawberry District

283. Cummings Flat (UF&G): SE1/4, sec. 17, T. 5 S., R. 6 E.; Wasatch; 7,000'; 1945; sagebrush, mountain brush; in 2 parts:
a. 1/4 acre; cattle; V; P;
b. 1/4 acre; cattle and deer; V; P.
284. Hogsback: SE1/4, sec. 4, T. 5 S., R. 6 E.; Wasatch; 9,500'; 1945; grass, forb; 1 acre; sheep; V; P.

UINTA NATIONAL FOREST

Strawberry District

285. Mud Creek: Sec. 24, T. 3 S., R. 12 W.; Wasatch; 7,500'; 1951; silver sagebrush; 1 acre; cattle; V; P.

Intermountain Forest & Range Experiment Station

286-298. Mud Creek Sheep Allotment (Strawberry District) 13 study plots, (Nos. 1-8, 10-14): Secs. 21, 22, 27, 34, T. 35, R. 12 W.; Wasatch; 7,800'-8,200'; 1959; 66' X 66' each; forb, grass; sheep; V; P.

299. One study plot (No. 9): SE1/4, sec. 22, T. 3 S., R. 12 W.; Wasatch; 7,600'; 1959; 5 acres; aspen; sheep; V.

WASATCH NATIONAL FOREST

Bountiful District

300. City Creek Watershed: T. 1 N., R. 1 E. (total watershed); Salt Lake; 5,400'-8,000'; 1914; maple, alder, birch, oak, conifer, cottonwood; 8 miles long, 2-1/2 miles wide; all domestic animals.

301. Davis County Experimental Watershed (IF&RES): T. 2 and 3 N., R. 1 E.; Davis; 4,400'-9,259'; 1930-1935; sagebrush, oak, maple, conifer, aspen, grass, forb; 35 square miles; all domestic animals.

302. Red Butte Watershed: T. 1 N., R. 1 E. (total watershed); Salt Lake; 4,800'-8,900'; 1888; mountain brush; 5 miles long by 2-1/2 miles wide; all domestic animals.

Evanston District

303. East Fork Bear River: SW1/4, sec. 26, T. 2 N., R. 10 E.; Summit; 8,800'; 1961; sagebrush; 1 acre; cattle, sheep; V; P.

304. Gold Hill: SE1/4, sec. 14, T. 1 N., R. 9 E.; Summit; 9,500'; 1960; sagebrush; 1 acre; sheep.

305. Humpy: SE1/4, sec. 6, T. 1 N., R. 9 E.; Summit; 9,400'; 1962; sagebrush; 1 acre; sheep; V; P.

306. Lyman Lake: NW1/4, sec. 4, T. 2 N., R. 12 E.; Summit; 9,100'; 1961; sagebrush; 1 acre; sheep, cattle; V; P.

307. Whitney: SW1/4, sec. 4, T. 1 N., R. 9 E.; Summit; 9,200'; 1960; grass; 1 acre; sheep; V; P.

Kamas District

308. Moon Canyon: NW1/4, sec. 6, T. 3 S., R. 7 E.; Summit; 7,700'; 1950; seeded grass; 1 acre; cattle; P.

309. Paulsin Basin: SE1/4, sec. 6, T. 2 S., R. 7 E.; Summit; 9,500'; 1957; seeded grass (Kentucky bluegrass); 1 acre; cattle; P.

WASATCH NATIONAL FOREST

Kamas District

310. Paulsin Basin Pilot Reseeding: NW1/4, sec. 12, T. 2 S., R. 6 E.; Summit; 8,800'; 1964; seeded grass; 1.2 acres; cattle; V.
311. Slate Creek: NE1/4, sec. 19, T. 2 S., R. 7 E.; Summit; 6,850'; 1959; sagebrush; 1 acre; cattle; P.

Mountain View District

312. Suicide Park: NE1/4, sec. 20, NW1/4, sec. 21, T. 3 N., R. 13 E.; Summit; 8,900'; 1960; dry meadow; 1 acre; cattle; V; P; (fence may be taken down in 1969)

Tooele District

313. Davenport Summer: NW1/4, sec. 22, T. 3 S., R. 7 W.; Tooele; 7,600'; 1963; aspen; in 2 parts:
a. 1 acre; cattle; V;
b. 1 acre, cattle and deer; V.
314. Harker Summer (UF&G): NW1/4, sec. 11, T. 10 S., R. 6 W.; Tooele; 7,200'; 1956; aspen, sagebrush; in 2 parts:
a. 1 acre; cattle; V; P;
b. 1 acre, cattle and deer; V; P.
315. Rock Canyon - Log Hollow (UF&G): SW1/4, sec. 10, T. 9 S., R. 7 W.; Tooele; 6,450'; 1938; sagebrush, mountain brush; in 2 parts:
a. 1/3 acre; livestock; P;
b. 1/3 acre; livestock and deer; P.
316. Round Canyon Deer, Cow (Winter) (in need of repair): SW1/4, sec. 5, T. 3 S., R. 7 W.; Tooele; 6,200'; 1948; juniper, sagebrush; in 2 parts:
a. 1 acre; cattle;
b. 1 acre; cattle and deer.

Intermountain Forest and Range Experiment Station - Benmore Experimental Range (Tooele District): T. 9 S., R. 5 W.; Tooele; 5,600'-5,800'; 1948; seeded grass:

- 317-332. 16 exclosures (mainly Agropyron desertorum): 2 X 4 rods each; cattle; V; P.
- 333-340. 8 exclosures (mainly Agropyron cristatum): 2 X 4 rods each; cattle; V; P.

BUREAU OF LAND MANAGEMENT

Cedar City District

341. Buckhorn: Sec. 34, T. 31 S., R. 8 W.; Iron; 5,900'; 1953; sagebrush; 10 acres; cattle and sheep; P.
342. Castle Cliff (Experimental Plot #1) (UF&G): NE1/4, sec. 7, T. 43 S., R. 18 W.; Washington; 3,600'; 1958; blackbrush; 1 acre; sheep and cattle.
343. Cottonwood (UF&G): Sec. 30, T. 32 S., R. 72; Iron; 5,900'; 1961; sagebrush, galleta, and Indian ricegrass (juniper cut); 660' X 330'; livestock, rabbits, and deer; V; P.

BUREAU OF LAND MANAGEMENT

Cedar City District

344. Gould: NE1/4, sec. 30, T. 42 S., R. 12 W.; Washington; 4,300'; 1959; salt desert shrub (fourwing saltbush, Indian ricegrass, galleta); 10 acres; cattle; P.
345. Green's Lake (UF&G): NE1/4, sec. 25, T. 36 S., R. 11 W.; Iron; 6,800'; 1960; sagebrush; in 2 parts:
a. 1 acre; livestock;
b. 1 acre; livestock and deer.
346. Hamblin Valley #1 (UF&G): NE1/4, sec. 4, T. 32 S., R. 18 W.; Iron; 6,600'; 1940; sagebrush, seeded grass (crested wheatgrass); 200' X 200'; cattle.
347. Hamblin Valley #2 (UF&G): SW1/4, sec. 9, T. 32 S., R. 1 W.; Iron; 6,600'; 1940; sagebrush, seeded grass (crested wheatgrass); 200' X 200'; cattle.
348. Little Mountain Reseeding Plot: SW1/4 and SE1/4, secs. 16 and 14, T. 35 S., R. 18 W.; Iron; 5,400'; 1940; sagebrush, seeded grass; 200' X 200'; sheep.
349. Manganese Wash: NE1/4 and SE1/4, sec. 25, T. 40 S., R. 18 W.; Washington; 3,800'; 1936; salt desert shrub (galleta); 2-1/2 acres; cattle and rabbits.
350. Middle Ridge (UF&G): NE1/4, sec. 32, T. 38 S., R. 19 W.; Washington; 5,500'; 1958; mountain brush (serviceberry, oak, skunkbrush, bitterbrush); 10 acres; cattle; P.
351. Motoqua (UF&G): SW1/4, sec. 11, T. 40 S., R. 19 W.; Washington; 1938; seeded grass (tall, crested, and pubescent wheatgrasses); 2-1/2 acres; cattle and rabbits.
352. Muley Point Tree Planting: NW1/4, sec. 31, T. 31 S., R. 7 W.; Iron; 5,900'; 1962; Russian olive and chinese elm, grass and weed understory; 40 acres; cattle and rabbits.
353. Negro Lizza Wash #1 (UF&G): SW1/4, sec. 9, T. 33 S., R. 17 W.; Iron; 5,600'; 1940; sagebrush; 200' X 200'; livestock.
354. Negro Lizza Wash #2 (UF&G): NE1/4, sec. 10, T. 33 S., R. 17 W.; Iron; 5,600'; 1940; sagebrush; 200' X 200'; livestock.
355. Old Minersville Road: NW1/4, sec. 7, T. 33 S., R. 10 W.; Iron; 5,700'; 1940; sagebrush, rabbitbrush; 200' X 200'; livestock.
356. Parowan Gap (Rush Lake) (UF&G): NW1/4, sec. 31, T. 33 S., R. 10 W.; Iron; 5,400'; 1940; rabbitbrush; 200' X 200'; livestock.
- *357. Sagebrush Flat Natural Area: Secs. 18 and 19, T. 31 S., R. 6 W.; Iron; 7,400'; pinyon-juniper, sagebrush, bitterbrush, bluebunch wheatgrass, Indian ricegrass, galleta; 400 acres; all livestock.

Fillmore District

358. Big Cedar Cove (UF&G): NW1/4 and SE1/4, sec. 14, T. 27 S., R. 9 W.; Beaver; 6,800'; 1959; pinyon-juniper (chained), seeded grass; in 2 parts:
a. 1 acre; cattle; P;
b. 1 acre; cattle and deer; P.

BUREAU OF LAND MANAGEMENT

Fillmore District

359. Death Canyon: SW1/4, sec. 10, T. 17 S., R. 13 W.; Millard; 6,300'; 1938; sagebrush, shadscale, seeded grass (crested wheatgrass); 260' X 200'; cattle.
360. Narrow Neck Cove (UF&G): SW1/4, sec. 8, T. 26 S., R. 8 W.; Beaver; 6,800'; 1960; sagebrush, pinyon-juniper; in 2 parts (rabbits excluded from 1/2 acre of each):
- a. 1 acre; deer and cattle; V; P;
 - b. 2 acres; cattle; V; P.
361. Negro Mag (UF&G): SW1/4, sec. 6, T. 27 S., R. 8 W.; Beaver; 6,800'; 1959; pinyon-juniper; in 2 parts:
- a. 1 acre; cattle; P;
 - b. 1 acre; deer; P.

Kanab District

- *362. Cockscomb (Natural Area): Secs. 19, 29, 30, T. 41 S., R. 1 W.; Kane; 4,792'-5,682'; sparse pinyon-juniper, sagebrush; 880 acres; all livestock.
363. Elbow: SE1/4, sec. 27, T. 40 S., R. 5 W.; Kane; 6,200'; 1967; sagebrush, pinyon-juniper; in 4 parts:
- a. 2-1/2 acres; livestock;
 - b. 2/3 acre; livestock and rabbits;
 - c. 2/3 acre; livestock, deer, and rabbits;
 - d. 2/3 acre; livestock and deer.
- *364. Elephant Butte (Natural Area): Secs. 14, 15, T. 43 S., R. 9 W.; Kane; 6,200'-6,795'; pinyon-juniper, sagebrush; 400 acres; all livestock.
365. Elephant Gap (UF&G): SE1/4, sec. 26, T. 42 S., R. 9 W.; Kane; 5,600'; 1961; pinyon-juniper, sagebrush; in 4 parts:
- a. 1-1/2 acres; livestock;
 - b. 1/2 acre; livestock and rabbits;
 - c. 1/2 acre; livestock, deer, and rabbits;
 - d. 1/2 acre; livestock and deer.
- *366. Indian Canyon (Natural Area): Secs. 20, 21, T. 43 S., R. 7 W.; Kane; 5,640'; canyon and streamside flora; 70 acres; all livestock.
367. Nephi Pasture: NW1/4, sec. 1, T. 42 S., R. 4 W.; Kane; 6,400'; 1967; sagebrush; in 4 parts:
- a. 2-1/2 acres; livestock;
 - b. 2/3 acre; livestock and rabbits;
 - c. 2/3 acre; livestock, deer, and rabbits;
 - d. 2/3 acre; livestock and deer.
- *368. No Man's Land Mesa (Natural Area) (SCS): Secs. 9, 10, 14, 15, 16, 22, 23, 25, 26, T. 40 S., R. 3 W.; Kane; 6,600'-7,200'; pinyon-juniper, sagebrush, oak; livestock; V; P; (see Mason et al. 1967).
369. Sunset Flat: Sec. 11, T. 38 S., R. 5 E.; Kane; 4,600'; 1960; salt desert shrub (fourwing saltbush); 100' X 200'; cattle.

BUREAU OF LAND MANAGEMENT

Kanab District

370. Swapp Allotment Game Range Study Plot: NE1/4, sec. 3, T. 42 S., R. 6 W.; Kane; 5,500'; 1961; sagebrush; in 4 parts:
- a. 1-1/2 acres; livestock;
 - b. 1/2 acre; livestock and rabbits;
 - c. 1/2 acre; livestock, deer, and rabbits;
 - d. 1/2 acre; livestock and deer.

- *371. Water Canyon (Natural Area): Secs. 29, 30, 32, T. 43 S., R. 7 W.; Kane; 5,400'; canyon and streamside flora; 165 acres; all livestock.

Monticello District

372. Agate: SE1/4, sec. 19, T. 20 S., R. 25 E.; Grand; 4,500'; 1961; sagebrush, galleta; 1 acre; sheep.

373. Alkali (UF&G): SE1/4 and NE1/4, sec. 23, T. 36 S., R. 23 E.; San Juan; 6,200'; 1962; seeded grass (crested wheatgrass); in 2 parts:
- a. 1 acre; cattle;
 - b. 1 acre; cattle and deer.

374. Baullies (UF&G): NW1/4, sec. 5, T. 38 S., R. 20 E.; San Juan; 6,200'; 1958; seeded grass (crested wheatgrass); in 2 parts:
- a. 1 acre; cattle; V;
 - b. 1 acre; cattle and deer; V.

375. Beef Basin (UF&G): SW1/4, sec. 21, T. 32 S., R. 19 E.; San Juan; 6,300'; 1958; sagebrush, galleta; in 2 parts:
- a. 1 acre; livestock;
 - b. 1 acre; livestock and deer.

376. Blue Chief: SE1/4, sec. 35, T. 23 S., R. 24 E.; Grand; 5,080'; 1961; black-brush, galleta; 1 acre; cattle.

- *377. Book Cliff Natural Area (Cunningham) (SCS): Sec. 34, T. 19 S., R. 21 E.; Grand; 7,000'; pinyon-juniper; 100 acres; livestock; P.

- *378. Book Cliff Natural Area (Cunningham burn) (SCS): Sec. 27, T. 19 S., R. 21 E.; Grand; 7,000'; grass (bluebunch wheatgrass); 40 acres; livestock; V; P.

379. Buckhorn: NE1/4, sec. 33, T. 22 S., R. 25 E.; Grand; 4,920'; 1961; sagebrush, galleta; 208' square; cattle and sheep.

380. Cisco Mesa: Sec. 22, T. 20 S., R. 23 E.; Grand; 4,840'; 1960; salt desert shrub (shadscale, galleta); 1 acre; sheep and cattle.

381. Cisco Wash: SE1/4, sec. 6, T. 21 S., R. 23 E.; Grand; 4,500'; 1961; salt desert shrub (galleta, shadscale); 208' square; cattle and sheep.

382. Cottonwood: Sec. 28, T. 20 S., R. 24 E.; Grand; 4,600'; 1960; salt desert shrub (Nuttall's saltbush, galleta); 1 acre; sheep and cattle.

383. Cottonwood: NE1/4, sec. 35, T. 19, R. 24 E.; Grand; 4,500'; 1961; salt desert shrub (shadscale, Nuttall's saltbush); 208' square; sheep.

BUREAU OF LAND MANAGEMENT

Monticello District

384. Cottonwood (UF&G): SW1/4, sec. 22, T. 32 S., R. 21 E.; San Juan; 6,000'; 1958; sagebrush, galleta; in 2 parts:
a. 1 acre; livestock; V; P;
b. 1 acre; livestock and deer; V; P.
385. Cowskin: SE1/4, sec. 28, T. 23 S., R. 24 E.; Grand; 5,040'; 1961; salt desert shrub (fourwing saltbush, galleta); 1 acre; cattle.
386. Deer Flat (UF&G): NW1/4 and SE1/4, sec. 12, T. 36 S., R. 17 E.; San Juan; 7,600'; 1951; seeded grass (crested wheatgrass); in 2 parts:
a. 300' X 400'; cattle;
b. 300' X 400'; cattle and deer.
387. Hart Point (UF&G): NE1/4 and SW1/4, sec. 3, T. 32 S., R. 22 E.; San Juan; 6,400'; 1960; sagebrush, blue grama; in 2 parts:
a. 1 acre; cattle;
b. 1 acre; cattle and deer.
388. Horse Pasture (UF&G): NE1/4, sec. 14, T. 20 S., R. 21 E.; Grand; 5,100'; 1965; sagebrush, galleta, fourwing saltbush; 5 acres (small deer exclosure inside); cattle and sheep.
389. Hotel Mesa: SE1/4, sec. 34, T. 22 S., R. 24 E.; Grand; 4,400'; 1961; salt desert shrub (shadscale, galleta); cattle and sheep.
390. Lost Spring: SE1/4, sec. 8, T. 23 S., R. 22 E.; Grand; 4,800'; 1960; galleta, Indian ricegrass; 1 acre; sheep and cattle.
391. Lower Lost Park (UF&G): SE1/4, sec. 19, T. 36 S., R. 18 E.; San Juan; 1958; sagebrush, blue grama, galleta; in 2 parts:
a. 1 acre; cattle;
b. 1 acre; cattle and deer.
392. Harley Dome (McIntire) (UF&G): NE1/4, sec. 22, T. 18 S., R. 25 E.; Grand; 4,900'; 1960; salt desert shrub (shadscale, cheatgrass); 1 acre; sheep and cattle.
393. Pumphouse: SE1/4, sec. 28, T. 21 S., R. 24 E.; Grand; 4,320'; 1961; salt desert shrub (galleta, shadscale); 208' square; sheep.
394. Sager's Flat (UF&G): SW1/4, sec. 27, T. 21 S., R. 21 E.; Grand; 4,720'; 1960; salt desert shrub (galleta, mat saltbush); 1 acre; cattle and sheep.
395. Sand Flat: SW1/4, sec. 6, T. 22 S., R. 25 E.; Grand; 4,400'; 1961; salt desert shrub (shadscale, galleta); 208' square; cattle and sheep.
396. Shay Mesa (UF&G): NE1/4 and SW1/4, sec. 20, T. 32 S., R. 22 E.; San Juan; 7,000'; 1958; sagebrush, seeded grass (crested wheatgrass); in 2 parts:
a. 1 acre; livestock;
b. 1 acre; livestock and deer; V; P.
397. Texas Flat (UF&G): NW1/4, sec. 7, T. 37 S., R. 20 E.; San Juan; 7,200'; 1958; seeded grass (crested wheatgrass); in 2 parts:
a. 1 acre; cattle; V; P;
b. 1 acre; cattle and deer; V; P.

BUREAU OF LAND MANAGEMENT

Monticello District

398. Thompson (UF&G): SW1/4, sec. 31, T. 21 S., R. 20 E.; Grand; 4,925'; 1938; salt desert shrub (sand dropseed, galleta, shadscale); 1 acre; sheep and cattle.
399. Westwater (Elizondo) (UF&G): SW1/4, sec. 31, T. 18 S., R. 25 E.; Grand; 4,800'; 1961; salt desert shrub (shadscale, galleta, Nuttall's saltbush); 1 acre; sheep.
400. Wild Cow Point (UF&G): SE1/4 and SW1/4, sec. 9, T. 33 S., R. 18 E.; San Juan; 7,300'; 1958; seeded grass (crested wheatgrass); in 2 parts:
a. 1 acre; cattle; V;
b. 1 acre; cattle and deer; V.

Price District

401. Blackbrush: Sec. 18, T. 23 S., R. 14 E.; Emery; 4,600'; 1941; blackbrush, Indian ricegrass; 4 acres; cattle, sheep, and rabbits.
402. Buckhorn (UF&G): SE1/4 and NW1/4, sec. 15, T. 19 S., R. 10 E.; Emery; 5,500'; 1937; salt desert shrub (fourwing saltbush, Indian ricegrass, galleta); 4 acres; cattle and rabbits; P.
403. Cedar Mountain: NW1/4, sec. 28, T. 18 S., R. 11 E.; Emery; 6,800'; 1938; sagebrush; 4 acres; cattle, sheep, and rabbits; P.
404. Clarks Valley: SE1/4, sec. 28, T. 14 S., R. 12 E.; Carbon; 5,800'; 1963; greasewood; 4 acres; cattle (rabbits from 3 acres).
- *405. Dunes Natural Area: NW1/4 and NE1/4, sec. 14, T. 26 S., R. 13 E.; Emery; 5,200'; oak (Quercus undulata); 320 acres; all livestock.
406. Dutch Flat: NW1/4, sec. 31, T. 20 S., R. 8 E.; Emery; 5,900'; 1940; salt desert shrub (Nuttall's saltbush, Indian ricegrass, galleta); 4 acres; cattle and rabbits; P.
- *407. Ireland Mesa Natural Area: Secs. 29, 32, 33, T. 24 S., R. 8 E.; Emery; 6,100'; galleta, ephedra, Bigelow sagebrush, Indian ricegrass; 1,000 acres; livestock.
- *408. Link Flat Natural Area: Secs. 28, 29, 30, 31, 32, T. 23 S., R. 9 E.; Emery; 6,600'; salt desert shrub (fourwing saltbush); 1,310 acres; some livestock grazing; P.
409. Little Park Deer (UF&G): SE1/4 and NW1/4, sec. 25, T. 16 S., R. 14 E.; Carbon; 7,000'; 1962; sagebrush; in 2 parts:
a. 2 acres; cattle and rabbits; P;
b. 1 acre; cattle and deer; P.
- *410. Mesa Butte Natural Area: Secs. 22, 23, 26, 27, 34, 35, T. 23 S., R. 6 E.; Emery; 6,500'; pinyon-juniper, Bigelow sagebrush, Indian ricegrass, galleta; 580 acres; livestock; P.
411. Porphyry Bench Deer (Gordon Creek) (UF&G): Sec. 15, T. 14 S., R. 9 E.; Carbon; 5,900'; 1958; sagebrush, wheatgrass, Indian ricegrass, blue grama; in 2 parts:
a. 1/2 acre; cattle and rabbits; P;
b. 1/2 acre; cattle and deer; P.

BUREAU OF LAND MANAGEMENT

Price District

412. Sinbad: NW1/4, sec. 20, T. 22 S., R. 12 E.; Emery; 6,600'; 1937; fourwing saltbush, blue grama, black sagebrush; 4 acres; cattle and rabbits; P.
413. Walker Flat Experimental Plot: NW1/4, sec. 1, T. 23 S., R. 5 E.; Sevier; 6,200'; 1941; salt desert shrub (shadscale, galleta); in 2 parts:
- a. 2 acres; cattle; P;
 - b. 2 acres; cattle and rabbits; P.

Richfield District

414. Airplane Springs (UF&G): NW1/4, sec. 28, T. 32 S., R. 10 E.; Garfield; 7,700'; 1961; seeded grass (crested wheatgrass); in 2 parts:
- a. 1 acre; cattle, sheep, and buffalo; V; P;
 - b. 1 acre; deer, rabbits, cattle, sheep, and buffalo; V; P.
415. Bitter Creek Divide: SW1/4, sec. 5, T. 33 S., R. 8 E.; Garfield; 5,600'; 1952; salt desert shrub (shadscale, Nuttall's saltbush, Indian ricegrass, galleta); 1/10 acre; cattle and sheep; V; P.
416. Cove: NW1/4, sec. 23, T. 31 S., R. 4 W.; Garfield; 5,700'; 1960; sagebrush, seeded grass; 21 acres; cattle; P.
417. Halfway Bench: NE1/4, sec. 13, T. 29 S., R. 11 E.; Wayne; 4,600'; 1930; salt desert shrub (shadscale, Indian ricegrass, galleta); 160' X 160'; sheep and cattle; V; P.
418. Horn (UF&G): SW1/4, sec. 22, T. 32 S., R. 10 E.; Garfield; 8,000'; 1956; sagebrush, mixed shrub; 2 acres; cattle and sheep; V; P.
419. Martel's Study Plot: SE1/4, sec. 19, T. 29 S., R. 3 W.; Piute; 6,250'; 1964; sagebrush (seeded grass on half); 20 acres, 80 X 40 rods; cattle and rabbits; P.
- *420. North Cainsville Mesa Natural Area: Secs. 5, 7, 8, 18, T. 28 S., R. 9 E.; Wayne; 6,000'; salt desert shrub (fourwing saltbush, shadscale, Indian ricegrass, galleta); all livestock.
421. Sage Flat Experimental Deer (UF&G): NW1/4, sec. 35, T. 22 S., R. 1 W.; Sevier; 6,000'; 1955; sagebrush; in 3 parts:
- a. 1 acre; sheep; P;
 - b. 1/2 acre; sheep and deer; P;
 - c. 1/2 acre; sheep, deer, and rabbits; P.
422. Sidehill Spring (UF&G): SW1/4, sec. 24, T. 33 S., R. 10 E.; Garfield; 8,200'; 1959; sagebrush; in 2 parts:
- a. 1 acre; sheep and cattle; V;
 - b. 1 acre; sheep, cattle, and deer; V.
- *423. South Cainsville Mesa Natural Area: Secs. 5, 6, 7, 8, 18, T. 29 S., R. 9 E.; Wayne; 5,850'; sagebrush, shadscale, pinyon-juniper, Indian ricegrass, galleta; 3,791 acres; sheep and cattle; V.
424. South Creek Exclosure (UF&G): SW1/4, sec. 9, T. 32 S., R. 10 E.; Garfield; 1963; sagebrush, mixed shrub; in 2 parts:
- a. 1 acre; cattle and sheep; V; P;
 - b. 1 acre; deer, cattle, and sheep; V; P.

BUREAU OF LAND MANAGEMENT

Salt Lake District

425. Bovine Deer Study plot (UF&G): NE1/4, sec. 18, T. 9 N., R. 16 W.; Box Elder; 6,000'; 1955; sagebrush, bitterbrush, black sagebrush; in 2 parts:
a. sheep and cattle;
b. sheep, cattle, and deer.
426. Red Butte Deer (UF&G): SW1/4, sec. 10, T. 11 N., R. 17 W.; Box Elder; 6,000'; 1964; sagebrush; 240' X 401'; cattle, deer, rabbits.
427. Rush Valley: NW1/4, sec. 34, T. 6 S., R. 4 W.; Tooele; 5,100'; 1940; salt desert shrub (Nuttall's saltbush, shadscale); 500' X 500'; sheep.
428. Woodruff Pastures (UF&G): NW1/4, sec. 11, T. 9 N., R. 6 E.; Rich; 7,000'; 1963; sagebrush, bitterbrush, black sagebrush; in 2 parts:
a. cattle; 200 X 300'; P;
b. cattle and deer; 200' X 300'; P.
429. (No name) NW1/4, sec. 31, T. 14 S., R. 16 W.; Juab; 6,000'; 1963; black sagebrush, rabbitbrush, galleta; 2 acres; cattle and sheep; P.
430. (No name) NE1/4, sec. 4, T. 13 S., R. 9 W.; Juab; 5,300'; 1963; shadscale, rabbitbrush, galleta; 2 acres; sheep and cattle; P.
431. (No name) NW1/4, sec. 10, T. 11 S., R. 6 W.; Juab; 6,000'; 1963; juniper, black sagebrush, rabbitbrush, shadscale; 2 acres; cattle and sheep; P.

Vernal District

432. Atchee Ridge (UF&G): NE1/4, sec. 4, T. 13 S., R. 25 E.; Uintah; 6,500'; 1964; mountain mahogany, serviceberry; in 2 parts:
a. 4 acres; cattle; P;
b. 1 acre; deer; P.
433. Big Park (UF&G): SE1/4 and NE1/4, sec. 4, T. 13 S., R. 24 E.; Uintah; 6,500'; 1964; sagebrush, fourwing saltbush; in 2 parts:
a. 4 acres; cattle;
b. 1 acre; deer.
434. Blue Mountain Big Game (UF&G): NW1/4, sec. 15, T. 5 S., R. 25 E.; Uintah; 8,000'; 1965; sagebrush; in 2 parts:
a. 3 acres; cattle;
b. 2 acres; cattle and deer.
435. Browns Park: NW1/4, sec. 33, T. 2 N., R. 25 E.; Daggett; 5,720'; 1958; sagebrush, shadscale (partially seeded to crested wheatgrass); 10 acres; cattle; P.
436. Brush Creek (UF&G): NE1/4, sec. 35, T. 2 S., R. 22 E.; Uintah; 6,000'; 1964; sagebrush, shadscale, seeded grass (crested wheatgrass); in 3 parts:
a. 3 acres; cattle;
b. 2 acres; cattle and big game;
c. 35' X 35'; cattle, big game, and rodents.
437. Burns Bench: NW1/4, sec. 22, T. 4 S., R. 22 E.; Uintah; 5,210'; 1964; salt desert shrub (Nuttall's saltbush, shadscale); 185' X 185'; sheep.

BUREAU OF LAND MANAGEMENT

Vernal District

438. Clay Basin Big Game (UF&G): NE1/4, sec. 28, T. 3 N., R. 24 E.; Daggett; 6,420'; 1958; sagebrush, shadscale, fourwing saltbush; 400' X 400'; sheep and cattle; P.
439. Crows Roost (UF&G): Sec. 35, T. 14 S., R. 22 E.; Uintah; 6,500'; 1967; four-wing saltbush, sagebrush; in 2 parts:
a. 1 acre; deer, cattle, and sheep;
b. 4 acres; cattle and sheep.
440. Deadman Bench: SW1/4, sec. 13, T. 7 S., R. 24 E.; Uintah; seeded grass (crested wheatgrass); 40 acres; 1320' X 1320'; sheep; V; P.
441. Gyp Plant Hill: NW1/4, sec. 16, T. 4 S., R. 22 E.; Uintah; 5,340'; 1964; salt desert shrub (shadscale, winterfat, galleta, Indian ricegrass); 3 acres; sheep.
442. Lower McCook Ridge Game Study Plot (UF&G): SW1/4, sec. 31, T. 13 S., R. 24 E.; Uintah; 6,500'; 1964; salt desert shrub (fourwing saltbush, sagebrush); in 2 parts:
a. 4 acres; cattle;
b. 1 acre; cattle and deer.
443. McCook Ridge Deer Plot (UF&G): NW1/4, sec. 7, T. 15 S., R. 25 E.; Uintah; 7,000'; 1956; mahogany, serviceberry; in 2 parts:
a. 1 acre; cattle;
b. 1 acre; cattle and deer.
- *444. Nine Mile Butte (Natural Area): Sec. 35, T. 11 S., R. 17 E.; Uintah; 5,000'; salt desert shrub (shadscale, galleta); 1/4 mi. X 1/5 mi.; livestock; V; P.
445. Red Creek Flat (UF&G): SW1/4, sec. 21, T. 2 N., R. 24 E.; Daggett; 5,800'; 1963; sagebrush, seeded grass (crested wheatgrass); in 2 parts:
a. 2.5 acres; livestock; P;
b. 2.5 acres; livestock and big game; P.
446. Taylor Flat (UF&G): NW1/4, sec. 35, T. 2 N., R. 24 E.; Daggett; 5,720'; 1963; sagebrush, shadscale (partially seeded to grass); in 2 parts:
a. 2.5 acres; cattle;
b. 2.5 acres; big game and cattle.
447. Twelve Mile: NE1/4, sec. 3, T. 6 S., R. 20 E.; Uintah; sagebrush, shadscale; 5 acres; sheep.
- *448. White Face Butte Natural Area: Sec. 25, T. 12 S., R. 25 E.; Uintah; 7,000'; pinyon-juniper; 3/4 mi. X 1/3 mi.; livestock (heavy deer use in winter); V; P.
449. Winter Ridge Game (UF&G): NW1/4, sec. 26, T. 15 S., R. 21 E.; Uintah; 7,200'; 1964; sagebrush; 330' X 660'; cattle and deer.

NATIONAL PARKS

- *450. Bryce Canyon National Park: Garfield and Kane; 6,700'-9,100'; 1923; pinyon-juniper at lower elevations, ponderosa pine and Douglas-fir at higher elevations; 36,010 acres; all domestic livestock excluded.

NATIONAL PARKS

451. Bryce Canyon National Park - Bryce Canyon Deer Exclosure (UF&G): Sec. 22, T. 4 W., R. 37 S.; Garfield; 8,580'; 1957; ponderosa pine and Douglas-fir; 1 acre; deer (livestock excluded from entire Park).
- *452. Canyonlands National Park - Virginia Park Natural Area (U of U): Sec. 8, T. 31 S., R. 19 E.; San Juan; 5,600'; grassland (galleta, needleandthread); 240 acres; all livestock; V; P.
453. Dinosaur National Monument Livestock and Deer Exclosure: SE1/4, sec. 25, T. 3 S., R. 24 E.; Uintah; 5,400'; 1965; juniper-sagebrush; in 2 parts:
a. 5 acres; livestock; V;
b. 5 acres; livestock and deer; V.
- *454. Zion National Park: Washington; 3,950'-8,740'; 1919; Sonoran desert, pinyon-juniper; oakbrush, ponderosa pine, Douglas-fir (at higher elevations); 230 sq. mi.; all domestic livestock excluded.
- *455. Zion National Park - Timber Top Mountain Natural Area (SCS): Washington; 7,500'; ponderosa pine, Douglas-fir, oak, manzanita; 300 acres; deer and all domestic animals; P.

INTERMOUNTAIN FOREST AND RANGE EXPERIMENT STATION

Benmore Experimental Range (See Wasatch National Forest)

- 456-505. Desert Experimental Range: T. 24 and 25, R. 17 and 18 W.; Millard; 5,200'-8,400'; 1933; various salt desert shrub types; approx. 50 exclosures 1 to 10 acres in size on Experimental Range and Fillmore District (BLM); sheep and cattle; V; P.

Diamond Mountain Cattle Allotment (See Ashley National Forest)

Great Basin Experimental Area (See Manti-La Sal National Forest)

Mud Creek Sheep Allotment (See Uinta National Forest)

UTAH DIVISION OF FISH AND GAME

506. Byron Howard (IF&RES): Sec. 36, T. 16 S., R. 7 E.; Emery; 7,000'; 1963; seeded grass and shrubs; in 2 parts:
a. 2 acres; livestock; V;
b. 2 acres; livestock and deer; V.
507. Delle Ranch: SW1/4, sec. 5, T. 3 S., R. 7 W.; Tooele; 5,600'; 1948; sagebrush, mountain brush; in 2 parts:
a. 1 acre; livestock; P;
b. 1 acre; livestock and deer; P.
508. Four Mile Canyon: T. 13 S., R. 1 E.; Juab; 1959; 50 acres; livestock.
509. Hardware Ranch: SE1/4, sec. 11, T. 10 N., R. 3 E.; Cache; 5,850'; 1946; sagebrush, and mountain brush; 1 acre; game and livestock; P.
510. Indian Peaks: Sec. 21, T. 29 S., R. 18 W.; Wayne; 1960; in 2 parts:
a. 1 acre; livestock;
b. 1 acre; livestock and game;
(7 smaller exclosures; some rabbit-tight)

UTAH DIVISION OF FISH AND GAME

511. Kanab Creek: Sec. 3, T. 42 S., R. 6 W.; Kane; 1961; in 2 parts:
a. 1 acre; livestock;
b. 2 acres; livestock and game.
512. Pole Canyon: Sec. 9, T. 20 S., R. 2 E.; Sanpete; 6,000'; 1960; oak, mountain brush, and seeded grasses; in 2 parts:
a. 1 acre; livestock; V; P;
b. 1 acre; livestock and deer; V; P.
513. Yankee Reservoir: Sec. 20, T. 35 S., R. 8 W.; Iron; 1961; 1/2 acre; livestock and big game.

UTAH STATE UNIVERSITY

The following exclosures are constructed on a Bureau of Reclamation withdrawal from Public Domain lands in Grand County (see West and Ibrahim 1968):

514. Atriplex confertifolia - Hilaria jamesii habitat type: Sec. 5, T. 22 S., R. 23 E.; Grand; 4,430'; 1966; salt desert shrub (shadscale, galleta); 80 acres (half furrowed and seeded); sheep and cattle; V; P.
515. Atriplex corrugata habitat type: Sec. 20, T. 21 S., R. 23 E.; Grand; 4,000'; 1962; salt desert shrub; 40 acres; sheep and cattle; V; P.
516. Atriplex corrugata habitat type: Sec. 13, T. 22 S., R. 23 E.; Grand; 4,300'; 1962; salt desert shrub; 40 acres (half furrowed and seeded); sheep and cattle; V; P.
517. Atriplex corrugata habitat type: Sec. 34, T. 22 S., R. 23 E.; Grand; 4,000'; 1965, salt desert shrub; 80 acres (half furrowed and seeded); sheep and cattle; V; P.
518. Atriplex nuttallii var. nuttallii - Hilaria jamesii habitat type: Sec. 33, T. 22 S., R. 23 E.; Grand; 4,000'; 1965; salt desert shrub (Nuttall's saltbush, galleta); 80 acres (half furrowed and seeded); sheep and cattle; V; P.
519. Atriplex nuttallii var. nuttallii - Hilaria jamesii habitat type: Sec. 8, T. 22 S., R. 23 E.; Grand; 4,000'; 1965; salt desert shrub (Nuttall's saltbush, galleta); 40 acres (half furrowed and seeded); sheep and cattle; V; P.

The following exclosures are constructed on Bureau of Land Management lands (Salt Lake District) in Box Elder County; elevation 4,100'-4,600'; salt desert shrub type; sheep and cattle excluded; V.: (Information on size and date of establishment not available.)

520. Sec. 24, T. 11 N., R. 12 W.; 1 exclosure;
521. Sec. 31, T. 12 N., R. 11 W.; 1 exclosure;
522. Sec. 14, T. 13 N., R. 11 W.; 1 exclosure;
523-524. Sec. 15, T. 13 N., R. 11 W.; 2 exclosures;
525-526. Sec. 16, T. 13 N., R. 11 W.; 2 exclosures;
527. Sec. 17, T. 13 N., R. 11 W.; 1 exclosure;
528. Sec. 14, T. 14 N., R. 11 W.; 1 exclosure;

BRIGHAM YOUNG UNIVERSITY

529. Pole Canyon (Uinta National Forest, Spanish Fork District): Sec. 9, T. 6 S., R. 3 E.; Utah; 6,500'; 1949; mountain brush (oak, maple); livestock; V; P; (Allman 1953; Nixon 1967).

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