

NATIONAL NATURAL LANDMARK EVALUATION

LITTLE JACKS CREEK RESEARCH NATURAL AREA (IDAHO)

Columbia Plateau Natural Region

Low Sagebrush Theme

Low Sagebrush/Bluebunch Wheatgrass Subtheme

November 1989

prepared for

U.S. Department of the Interior
National Park Service

by

Idaho Natural Heritage Program
Idaho Department of Fish and Game
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INTRODUCTION

Daubenmire, in his 1975 theme study, proposed several "zones" that contain low sagebrush (Artemisia arbuscula) and early low sagebrush (A. longiloba) biotic communities. It was proposed in Phase I of the current study (The Nature Conservancy et al. 1989), that all low sagebrush and early low sagebrush communities be treated as a separate Low Sagebrush Theme. To best include the diversity of the Low Sagebrush Theme in the NNL registry, two subthemes were proposed: Low Sagebrush/Bluebunch Wheatgrass and Low Sagebrush/Idaho Fescue. This report evaluates a potential NNL site to represent the Low Sagebrush/Bluebunch Wheatgrass Subtheme.

In Phase II of the current study (Crawford et al. 1989), a total of four Low Sagebrush/Bluebunch Wheatgrass sites from Oregon and Idaho were evaluated on the basis of illustrative character, condition, diversity, rarity, and value for science and education. Sites evaluated were Little Jacks Creek Proposed Research Natural Area (PRNA) (ID), Triplet Butte PRNA (ID), Sutton Mountain (OR), and Shaketable Mountain PRNA (OR). On the basis of this evaluation, Little Jacks Creek PRNA was chosen to be the best example of this subtheme.

Since preparation of the Phase II report, it was learned from the BLM that Little Jacks Creek is an established Research Natural Area (RNA). It was established in the Management Framework Plan for the Bruneau Resource Area of the Boise District, Bureau of Land Management (BLM), finalized in 1983.

SITE CHARACTERISTICS

Location

The recommended NNL lies on a plateau south of the confluence of Rattlesnake Creek with Little Jacks Creek, on the Owyhee Plateau, Owyhee County, Idaho (Figure 1). The approximate center of the area lies at a latitude of 42°40'00" N and a longitude of 116°08'00" W. Lands within the proposed NNL boundary lie within Township 9 South, and Ranges 2 and 3 East. U.S. Geological Survey topographic map coverage is available on the Big Horse Basin Gap (1972) and Ox Lake (1972) 7.5' quadrangles. The Triangle Quadrangle Surface Management Status map, 1:100,000-scale series, published by the BLM also provides coverage.

The site lies about 37 km (23 miles) southwest of Bruneau, Idaho. Access to the proposed NNL site is via a complicated series of dirt roads that begin at the intersection of the Shoofly Road and State Highway 51, in Little Valley, about 13 km (8 miles) southwest of Bruneau. Proceed about 2 km (1.25 miles) west on the Shoofly Road, a well-maintained, all-weather, gravel road. Just before passing a gravel pit, turn south off the Shoofly Road. Proceed southwest then south on this fair-weather-only dirt road for about 32 km (20 miles) as it parallels Little Jacks Creek and steadily climbs onto the Owyhee Plateau. Numerous intersections are passed along the way, and the Triangle Surface Management Status map should be consulted frequently.

Figure 1. Location of the Little Jacks Creek Research Natural Area proposed NNL in Owyhee County, Idaho.

T 8 S

T 9 S

R 2 E

R 3 E

Proposed NNL

Eventually, a road takes off due north, and after about 6.5 km (4 miles) ends at the southern edge of the proposed NNL. After leaving the Shoofly Road, a high clearance vehicle is needed to get to the proposed NNL site. Four-wheel-drive is not necessary if the road is traveled in the dry season. More specific directions should be obtained from the Boise District BLM, Boise, Idaho.

Boundary

A boundary was chosen to encompass the range in diversity of the low sagebrush communities in the southern half of the Little Jacks Creek RNA. The boundary is the minimum required to include an adequate representation of features needed in the subtheme. The NNL boundary follows major topographic features (rim of canyon) on the west, north, and east sides. The southern boundary of the proposed NNL coincides with the southern boundary of the RNA, which follows both land survey (section) and point-to-point lines.

The Little Jacks Creek RNA proposed NNL occurs in two parcels, separated by a narrow canyon, and lies in the following sections:

T9S, R2E, Section 12

T9S, R3E, Sections 7, 8, 17

The boundary of the western parcel is as follows: Beginning at the corner common to Sections 7, 8, 17, and 18, T9S, R3E, proceed west along the section line common to Sections 7 and 18, for 1.6 km (1 mile) to the section corner. Proceed south along the section line common to Section 12, T9S, R2E, and Section 18, T9S, R3E, for about 122 m (400 feet) to the corner of Sections 12 and 13, T9S, R2E, and Section 18, T9E, R3E. Proceed west about 244 m (800 feet) along the section line common to Sections 12 and 13, T9S, R2E, to the rim of the small tributary canyon

of the Little Jacks Creek canyon. (From the beginning to this point, the NNL boundary coincides with part of the Little Jacks Creek RNA boundary.) Follow the prominent rim of the canyon in a generally northeasterly, then easterly direction along the Little Jacks Creek canyon, including small tributary canyons, to a point above the confluence of Rattlesnake Creek and Little Jacks Creek, approximately on the section line common to Sections 7 and 8, T9S, R3E. Continue to follow the rim of the canyon south for about 1.5 km (0.9 mile), a short distance along Rattlesnake Creek, then along a tributary, to where the canyon rim intersects the starting point.

The boundary of the eastern parcel is as follows: Beginning at the point where the canyon rim of a southerly-trending tributary canyon of Rattlesnake Creek intersects the section line common to Sections 8 and 17, T9S, R3E, proceed northerly along the canyon rim of the tributary canyon, then southeasterly along the Rattlesnake Creek canyon rim, then southerly and southwesterly along the canyon rim of a small tributary, to the center of Section 17, T9S, R3E. From the center of Section 17, proceed northwest, point-to-point, for about 854 m (2,800 feet) to the canyon rim of the southerly-trending tributary canyon of Rattlesnake Creek (this section of the NNL boundary coincides with part of the southern boundary of the Little Jacks Creek RNA). Proceed northerly for about 122 m (400 feet) to the starting point.

Size

The total area contained within the proposed NNL is estimated to be 319.7 ha (790 acres); 182.1 ha (450 acres) in the western parcel and 137.6 ha (340 acres) in the eastern parcel. Area was computed using a Tamay Planix 5000 digitizing planimeter. The site lies within the 793

ha (1,960 acre) Little Jacks Creek RNA.

Description

The Little Jacks Creek RNA proposed NNL occurs in the heart of the Owyhee Plateau, which is a large volcanic surface encompassing parts of southwestern Idaho, northeastern Nevada, and southeastern Oregon. The Owyhee Plateau is dissected by numerous canyons, of which the canyon cut by Little Jacks Creek is a typical example; it begins abruptly, is narrow, and is from 183 to 305 m (600 to 1,000 feet) deep. The site is located on the gently sloping plateau immediately south of the Little Jacks Creek Canyon.

Geology of the proposed area consists uniformly of Idavada Volcanics of Cenozoic age. All rocks in the area are included within the tuffs of Little Jacks Creek, which were deposited during the Miocene. They comprise a series of densely-welded rhyolitic tuffs, which range in thickness from 20 m (66 feet) to as much as 100 m (328 feet). The source area for the tuffs lies just to the east of 116° W (Ekren et al. 1981).

Climate of the Owyhee Plateau is best characterized as continental modified somewhat by maritime air from the Pacific Ocean. It is semiarid with typical intermountain characteristics of dry, hot summers and cold winters with precipitation occurring principally as snow during the winter and rain during the spring and fall. Summer precipitation is generally sparse and ineffective. These generalizations are borne out by precipitation and temperature records from Grasmere, Idaho, 37 km (23 miles) southeast of the proposed NNL and at a similar elevation (Table 1).

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 Table 1. Temperatures and precipitation for Grasmere, Idaho, weather station, from 1961 to 1974 (Caicco and Wellner 1983).
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| Month | Temperature °C (°F) | | Precipitation mm (inches) | |
|-----------|---------------------|-----------------|---------------------------|----------------|
| | Average Maximum | Average Minimum | Mean Monthly | Percent Annual |
| January | 3.8 (38.5) | -7.9 (17.7) | 16.3 (0.64) | 7.0 |
| February | 6.1 (43.0) | -5.8 (21.6) | 18.3 (0.72) | 7.9 |
| March | 9.4 (48.9) | -5.5 (22.1) | 7.1 (0.28) | 3.1 |
| April | 13.5 (56.3) | -2.2 (28.0) | 19.1 (0.75) | 8.2 |
| May | 20.2 (68.4) | 2.7 (36.9) | 29.2 (1.15) | 12.6 |
| June | 23.0 (73.4) | 6.3 (43.3) | 46.5 (1.83) | 19.8 |
| July | 31.1 (87.9) | 9.7 (49.5) | 7.9 (0.31) | 3.4 |
| August | 30.4 (86.8) | 9.5 (49.1) | 18.0 (0.71) | 7.8 |
| September | 24.3 (75.8) | 4.4 (39.9) | 11.2 (0.44) | 4.8 |
| October | 17.0 (62.6) | -1.6 (29.2) | 12.4 (0.49) | 5.4 |
| November | 9.2 (48.6) | -3.3 (26.1) | 17.8 (0.70) | 7.6 |
| December | 3.1 (37.8) | -8.3 (17.0) | 29.0 (1.14) | 12.4 |
| Annual | 15.8 (60.5) | -0.2 (31.7) | 232.7 (9.16) | 100.0 |

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Two types of soils support low sagebrush (Artemisia arbuscula) communities in the proposed NNL. Underlying the low sagebrush/bluebunch wheatgrass (Agropyron spicatum) association are soils that have a restrictive layer (claypan) in the upper 20-36 cm (8-14 inches). Soils generally have a moderately dark, silt loam to silty clay loam surface horizon that grades into a strongly developed clay B horizon at about 30 cm (12 inches). A strongly calcareous C horizon occurs at approximately 51 cm (20 inches), which overlies bedrock at 81 cm (32 inches). Soil orders include Mollisols and Aridisols (Hironaka et al. 1983).

Soils supporting the low sagebrush/Sandberg bluegrass (Poa sandbergii) association are too shallow to support bluebunch wheatgrass. There is little to no soil development (soil order Entisol) (Hironaka et al. 1983).

The site was chosen to represent the Low Sagebrush/Bluebunch Wheatgrass Subtheme of the Low Sagebrush Theme. The two associations included in this subtheme, low sagebrush/bluebunch wheatgrass and low

sagebrush/Sandberg bluegrass (Hironaka et al. 1983), comprise a majority of the vegetation in the proposed area. These two associations occur in a mosaic pattern with each other, on soils having a claypan (Figure 2).

In areas where the soil is a somewhat deeper, with a medium loam texture, the Wyoming big sagebrush (Artemisia tridentata ssp. wyomingensis)/bluebunch wheatgrass association (Hironaka et al. 1983) occurs. This association is well-developed only in

Figure 2. Location of biotic communities in the Little Jacks Creek Research Natural Area proposed NNL.

| | | | |
|-------|-------|-------|-------|
| T 8 S | T 9 S | R 2 E | R 3 E |
| 1 | 1 | 2 | |

Key to vegetation types:

1. Mosaic of low sagebrush/bluebunch wheatgrass and low sagebrush/Sandberg bluegrass associations.
2. Mosaic of low sagebrush/bluebunch wheatgrass, low sagebrush/Sandberg bluegrass, and Wyoming big sagebrush/bluebunch wheatgrass associations.

Plate 1. The canyon of Little Jacks Creek near its confluence with Rattlesnake Creek. The proposed NNL lies on the Owyhee Plateau on the south (right) side of the canyon.

Plate 2. Mosaic of low sagebrush/Sandberg bluegrass (foreground) and low sagebrush/bluebunch wheatgrass (lighter areas in middle ground) associations in the proposed NNL.

Plate 3. The low sagebrush/bluebunch wheatgrass association in the proposed NNL.

Plate 4. The Wyoming big sagebrush/Idaho fescue association in the Little Jacks Creek canyon, immediately north of the proposed NNL in the Little Jacks Creek RNA.

Plate 5. Riparian vegetation along Little Jacks Creek, immediately north of the proposed NNL in the Little Jacks Creek RNA.

Plate 6. The Owyhee Plateau is dissected by the canyon of Little Jacks Creek near Little Jacks Creek NNL.

that portion of the plateau which lies in the East 1/2 of Section 7 and the extreme western portion of Section 8 (T9S, R3E), where it occurs in a mosaic with the two low sagebrush associations.

Associations occurring north of the proposed area, but within the Little Jacks Creek RNA, are the Wyoming big sagebrush/ bluebunch wheatgrass, Wyoming big sagebrush/Idaho fescue (Festuca idahoensis), basin big sagebrush (A. tridentata ssp. tridentata)/bluebunch wheatgrass (Hironaka et al. 1983) on the canyonsides of Rattlesnake and Little Jacks creeks, and a riparian community along the two streams, dominated by chokecherry (Prunus virginiana), gooseberry (Ribes aureum), and red-osier dogwood (Cornus stolonifera).

Three regional endemics also occur in the RNA, north of the proposed NNL. Two plants, Packard's mugwort (Artemisia packardiae) and Bailey's ivesia (Ivesia baileyi), occur on cliffs and ledges of the canyon, and a fish, the redband trout (Salmo newberryi), inhabits Little Jacks Creek.

Land Use and Present Condition

Natural values of the site are currently being protected due to its inclusion within the larger Little Jacks Creek RNA.

The present condition of the proposed NNL is excellent. The Little Jacks Creek and Rattlesnake Creek canyons have acted as barriers to livestock grazing from the north, and the great distance from water has acted as a barrier to the south. Much of the Owyhee Plateau surrounding the proposed NNL has been grazed by several classes of domestic livestock for over a century.

A dirt road approaches the proposed NNL from the south, but ends near the southern boundary and does not significantly impact NNL values.

Little recreational activity takes place within the site, with most use probably occurring during hunting season in the fall. The Little Jacks Creek area, however, offers spectacular views and the greatest opportunity for primitive recreation and solitude in the Boise District BLM.

No archaeological sites are known to exist within the proposed NNL. A thorough inventory of the area, however, has not been made.

Anticipated Damage to the Area

Natural values of the proposed NNL are currently being protected due to its inclusion within the larger Little Jacks Creek RNA.

No roads exist within the area, and no roads are currently being planned. No ORV usage has occurred on the site, and such usage is unlikely due to generally impassable terrain.

As of August 1983, no mining claims have been established within the area. The geology of the area makes it unlikely that any such claims will be established in the future.

Effects of Publicity

The proposed NNL is not expected to be sensitive to increased publicity. The only effect foreseen of increased publicity is positive, that is, more of the public will learn of the nationally significant values of the area. Any increase in visitor use to the NNL is not expected to be great enough to impact the ecology of the area.

Ownership

All land within the proposed NNL is Federally owned. The U.S. Department of the Interior, Bureau of Land Management, Boise District

Office, Bruneau Resource Area, administers both surface and mineral rights of the area. The Boise District, BLM, office is located at:

Boise District Office
Bureau of Land Management
3948 Development Ave.
Boise, ID 83705
208/334-1582

ANALYSIS

Significance

The two low sagebrush communities occurring in Little Jacks Creek RNA are outstanding examples of the Low Sagebrush/Bluebunch Wheatgrass Subtheme of the Low Sagebrush Theme, as defined in Phase I of the 1989 study (The Nature Conservancy et al. 1989). It is also the best known example of this subtheme in the Columbia Plateau Natural Region, as evaluated in Phase II of the 1989 study (Crawford et al. 1989).

Recommendation

In my opinion, the site appears to be nationally significant and I recommend that it be designated as a National Natural Landmark.

Management Guidelines

Natural values of the site are currently being protected due to its inclusion within the larger Little Jacks Creek RNA. Cattle occasionally wander into the area from the south, but do not remain there long due to lack of water. Although no increase in cattle grazing is anticipated, over and above the incidental use that takes place there now, it should be periodically monitored.

The site is physically protected from most high-impact recreational use, and any increase in other types of recreation is not expected to degrade the integrity of the NNL.

General Background

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M.S. Botany, University of Idaho, Moscow (1985)

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Plant Ecologist, Idaho Natural Heritage Program (1988-present)

Information contained in this report is based on literature cited, interviews with Boise District BLM personnel and members of the Idaho Natural Areas Coordinating Committee, who inventoried and recommended Little Jacks Creek for designation as a RNA, and reconnaissance level field investigations during the summers of 1987 and 1989.

Considerable data was provided by Charles Wellner and Ed Tisdale, Idaho Natural Areas Coordinating Committee, and Steve Caicco, formerly ecologist with the Idaho Natural Areas Coordinating Committee and the Idaho Natural Heritage Program. I relied on their excellent report (Caicco and Wellner 1983) to a considerable degree during preparation of this evaluation. I visited the Little Jacks Creek for the first time in July 1987, as part of a natural areas inventory of BLM lands in Owyhee County. I greatly appreciate the use of a four-wheel-drive truck provided by the BLM's Idaho State Office and Boise District Office. I also visited the Little Jacks Creek area in August 1989. A total of approximately four days was spent researching and writing this NNL site evaluation for Little Jacks Creek RNA proposed NNL.

REFERENCES

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- The Nature Conservancy, Idaho Natural Heritage Program, Oregon Natural Heritage Data Base, and Washington Natural Heritage Program. 1989. Final Report, Phase I, 1989 National Natural Landmark Project, Pacific Northwest Region, National Park Service. Report submitted to U.S. Department of the Interior, National Park Service, Seattle, WA. 91 p.

APPENDIX

Common and scientific names of the vascular plant, mammal, reptile and bird species of known or probable occurrence within the recommended boundaries.

Vascular plant species observed in the Little Jacks Creek RNA proposed NNL.

SHRUBS

| | |
|--|-----------------------|
| <u>Artemisia arbuscula</u> | Low sagebrush |
| <u>Artemisia spinescens</u> | Bud sagebrush |
| <u>Artemisia tridentata</u> ssp. <u>wyomingensis</u> | Wyoming big sagebrush |
| <u>Chrysothamnus nauseosus</u> | Gray rabbitbrush |
| <u>Chrysothamnus viscidiflorus</u> | Green rabbitbrush |

GRASSES

| | |
|---------------------------|--------------------------|
| <u>Agropyron spicatum</u> | Bluebunch wheatgrass |
| <u>Poa sandbergii</u> | Sandberg bluegrass |
| <u>Sitanion hystrix</u> | Bottlebrush squirreltail |

FORBS

| | |
|-------------------------------|----------------------|
| <u>Antennaria dimorpha</u> | Low pussytoes |
| <u>Artemisia packardiae</u> | Packard's mugwort |
| <u>Aster scopulorum</u> | Lava aster |
| <u>Astragalus atratus</u> | Mourning milkvetch |
| <u>Castilleja chromosa</u> | Desert paintbrush |
| <u>Crepis acuminata</u> | Taper-tip hawksbeard |
| <u>Crepis intermedia</u> | Gray hawksbeard |
| <u>Lewisia rediviva</u> | Bitterroot |
| <u>Microseris troximoides</u> | Microseris |
| <u>Phacelia linearis</u> | Threadleaf phacelia |
| <u>Phlox longifolia</u> | Long-leaf phlox |

Mammals, reptiles, and birds of probable occurrence within the Little Jacks Creek RNA proposed NNL.

MAMMALS

| | |
|-----------------------------------|-----------------------------------|
| <u>Sorex merriamii</u> | Merriam's shrew |
| <u>Brachylagus leucurus</u> | Pygmy rabbit |
| <u>Sylvilagus nuttallii</u> | Nuttall's cottontail |
| <u>Lepus townsendii</u> | White-tailed jackrabbit |
| <u>Lepus californica</u> | Black-tailed jackrabbit |
| <u>Thomomys talpoides</u> | Northern pocket gopher |
| <u>Perognathus parvus</u> | Great Basin pocket mouse |
| <u>Reithrodontomys megalotis</u> | Western harvest mouse |
| <u>Peromyscus maniculatus</u> | Deer mouse |
| <u>Peromyscus crinitus</u> | Canyon mouse |
| <u>Microdipodops megacephalus</u> | Dark kangaroo mouse |
| <u>Onychomys pictus</u> | Northern grasshopper mouse |
| <u>Dipodomys ordii</u> | Ord's kangaroo rat |
| <u>Dipodomys microps</u> | Chisel-toothed kangaroo rat |
| <u>Neotoma cinerea</u> | Bushy-tailed woodrat |
| <u>Neotoma lepida</u> | Desert woodrat |
| <u>Microtus montanus</u> | Montane vole |
| <u>Microtus longicaudus</u> | Long-tailed vole |
| <u>Lemmyscus curtatus</u> | Sagebrush vole |
| <u>Spermophilus beldingi</u> | Belding's ground squirrel |
| <u>Spermophilus townsendii</u> | Townsend's ground squirrel |
| <u>Ammospermophilus leucurus</u> | White-tailed antelope squirrel |

Tamias minimus
Canis latrans
Vulpes macrotis
Mustela erminea
Mustela freneta
Taxidea taxus
Felis concolor
Felis rufus
Odocoileus hemionus
Antilocarpa americanus

Least chipmunk
Coyote
Kit fox
Short-tailed weasel
Long-tailed weasel
Badger
Mountain lion
Bobcat
Mule deer
Pronghorn

REPTILES

Gambelia wislizenii
Phrynosoma douglasii
Sceloporus graciosus
Sclerporus occidentalis
Uta stansburiana
Eumeces skiltonianus
Cnemidophorus tigris
Sonora semiannulata
Thamnophis elegans

Longnose leopard lizard
Short horned lizard
Sagebrush lizard
Western fence lizard
Side blotched lizard
Western skink
Western whiptail
Western ground snake
Western terrestrial
garter snake

Rhinocheilus lecontei
Hypsiglena torquata
Masticophis taeniatus
Charina bottae
Coluber constrictor
Pituophis melanoleucus
Crotalus viridus

Longnose snake
Night snake
Striped whipsnake
Rubber boa
Racer
Gopher snake
Western rattlesnake

BIRDS

Cathartes aura
Circus cyaneus
Buteo swainsoni
Buteo jamaicensis
Buteo regalis
Buteo lagopus
Aquila chrysaetos
Falco sparverius
Falco columbarius
Falco mexicanus
Alectoris chukar
Dendragapus obscurus
Centrocercus urophasianus
Columba livia
Zenaida macroura
Bubo virginianus
Asio otus
Asio flammeus
Aegolius acadicus
Chordeiles minor
Phalaenoptilus nuttallii
Aeronautes saxatalis
Archilchus alexandri
Stellula calliope
Selasphorus rufus

Turkey vulture
Northern harrier
Swainson's hawk
Red-tailed hawk
Ferruginous hawk
Rough-legged hawk
Golden eagle
American Kestrel
Merlin
Prairie falcon
Chukar
Blue grouse
Sage grouse
Rock dove
Mourning dove
Great horned owl
Long-eared owl
Short-eared owl
Northern saw-whet owl
Common nighthawk
Common poorwill
White-throated swift
Black-chinned hummingbird
Calliope hummingbird
Rufous hummingbird

| | |
|----------------------------------|-------------------------|
| <u>Colaptes auratus</u> | Northern flicker |
| <u>Empidonax oberhoiser</u> | Dusky flycatcher |
| <u>Sayornis saya</u> | Say's phoebe |
| <u>Myiachus cinerascens</u> | Ash-throated flycatcher |
| <u>Tyrannus verticalis</u> | Western kingbird |
| <u>Eremophila alpestris</u> | Horned lark |
| <u>Tachycineta bicolor</u> | Tree swallows |
| <u>Pica pica</u> | Black-billed magpie |
| <u>Corvus corax</u> | Common raven |
| <u>Salpinctes obsoletus</u> | Rock wren |
| <u>Sialia currucoides</u> | Mountain bluebird |
| <u>Myadestes townsendi</u> | Townsend's solitaire |
| <u>Oreoscoptes montanus</u> | Sage thrasher |
| <u>Lanius excunitor</u> | Northern shirke |
| <u>Lanius ludovicianus</u> | Loggerhead shrike |
| <u>Vermivora celata</u> | Orange-crowned warbler |
| <u>Passerina amoena</u> | Lazuli bunting |
| <u>Pipilo chorurus</u> | Green-tailed towhee |
| <u>Pipilo erythrophthalmus</u> | Rufous-sided towhee |
| <u>Spizella passerina</u> | Chipping sparrow |
| <u>Spizella breweri</u> | Brewer's sparrow |
| <u>Pooecetes gramineus</u> | Vesper sparrow |
| <u>Chondestes grammacus</u> | Lark sparrow |
| <u>Amphispiza bilineata</u> | Black-throated sparrow |
| <u>Amphispiza belli</u> | Sage sparrow |
| <u>Passerculus sandwichensis</u> | Savannah sparrow |
| <u>Zonotrichia leucophrys</u> | White-crowned sparrow |
| <u>Plectrophenax nivalis</u> | Snow bunting' |
| <u>Sturnella negelecta</u> | Western meadowlark |
| <u>Euphagus cyanocephalus</u> | Brewer's blackbird |
| <u>Molothrus ater</u> | Brown-headed cowbird |

Little Jacks Creek Research Natural Area
National Natural Landmark Brief

Location: 37 km (23 miles) southwest of Bruneau, Owyhee County, Idaho.

Natural Region: Columbia Plateau

Size: 319.7 ha (790 acres)

Owner: Federal; Administered by the U.S. Department of the Interior, Bureau of Land Management, Boise District Office.

Description: The site occurs in the heart of the Owyhee Plateau, a large volcanic surface encompassing parts of southwestern Idaho, northeastern Nevada, and southeastern Oregon. The Owyhee Plateau is dissected by numerous canyons, of which the deep, narrow canyon cut by Little Jacks Creek is a typical example. The NNL is located on the gently sloping plateau, immediately south of the Little Jacks Creek canyon, and is within the larger Little Jacks Creek Research Natural Area (RNA).

The NNL represents the Low Sagebrush/Bluebunch Wheatgrass Subtheme of the Low Sagebrush Theme. The two associations included in this subtheme, low sagebrush/ bluebunch wheatgrass (Artemisia arbuscula/Agropyron spicatum) and low sagebrush/ Sandberg bluegrass (Poa sandbergii), comprise a majority of the vegetation in the NNL. These two associations occur in a mosaic, on soils having a claypan.

In the eastern portion of the site, where the soil is deeper, the

Wyoming big sagebrush (Artemisia tridentata ssp. wyomingensis)/
bluebunch wheatgrass association occurs. This association occurs in a
mosaic with the two low sagebrush associations.

Significance: The two low sagebrush communities occurring in Little
Jacks Creek RNA are outstanding examples of the Low Sagebrush/Bluebunch
Wheatgrass Subtheme of the Low Sagebrush Theme. The NNL is considered
the best known example of this subtheme in the Columbia Plateau Natural
Region.

Land use: The ecological condition of the site is excellent, due
largely to physical barriers that have prevented disturbance. The site
is managed as a RNA.

Special conditions: Natural values of the NNL are currently being
protected due to its inclusion within the larger Little Jacks Creek RNA.

Proposed by: Rexford C. Crawford, Washington Natural Heritage Program,
Jimmy S. Kagan, Oregon Natural Heritage Data Base, and Robert. K.
Moseley, Idaho Natural Heritage Program; 1989; Phase I and II Reports,
1989 National Natural Landmark Project, Columbia Plateau Natural Region
Ecological Themes, National Park Service.

Evaluated by: Robert K. Moseley, Plant Ecologist, Idaho Natural Heritage
Program, Idaho Department of Fish and Game, Boise, ID, November 1989.

Designated:

Owner agreement: