

# Wyoming Birding Bonanza

## Special Mission 2013: Black-backed Woodpeckers

**WANTED:**  
Sightings of the Black-backed Woodpecker

Adult Male

Adult Female

### Information Packet

**>> [uwyo.edu/biodiversity/birding](http://uwyo.edu/biodiversity/birding)**

#### Mission coordinated by:

Wyoming Natural Diversity Database ([uwyo.edu/wyndd](http://uwyo.edu/wyndd))  
UW Vertebrate Collection ([uwyo.edu/biodiversity/vertebrate-museum](http://uwyo.edu/biodiversity/vertebrate-museum))  
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Remember to bird ethically! Follow the link to read the American Birding Association's Code of Ethics:  
<http://www.aba.org/about/ethics.html>



# Wyoming Birding Bonanza Special Mission 2013



# WANTED:

## Sightings of the Black-backed Woodpecker

This bird species is sought after in the Laramie Peak area in central Wyoming. It has never been seen there before, but because of this species' keen ability to find recently-burned forests to call home, authorities suspect it will appear. This species is petitioned for protection under the Endangered Species Act - we need your help to search for these birds in the Laramie Peak area, and submit your observation data!



Adult Male



Adult Female



Ideal Black-backed Woodpecker Habitat

**SUBMIT YOUR DATA!**



Submit observations at [ebird.org](http://ebird.org)  
More information: [uwyo.edu/biodiversity/birding](http://uwyo.edu/biodiversity/birding)

Bird Photos courtesy of Glen Tepke (<http://www.pbase.com/gtepkpe/profile>)  
Habitat Photo courtesy of Michael Wickens



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## Wyoming Birding Bonanza

### Special Mission 2013: Black-backed Woodpeckers

#### The Issue:

Black-backed Woodpecker (*Picoides arcticus*) is a large woodpecker that is distributed across the boreal forests of North America. In Wyoming, the species is found in the northwestern corner of the state, and also in the Black Hills. Recent evidence suggests that the Black Hills population is genetically unique. This population was recently petitioned for protection under the Endangered Species Act (ESA).

In Wyoming, the species is typically found in mature spruce-fir forests and lodgepole pine and ponderosa pine forests that have recently been disturbed through pine beetle infestation or wildfire. Outside of extreme northwestern Wyoming, the species is almost exclusively found in recently disturbed ponderosa pine and lodgepole pine forests.

While the species has not been detected in the Laramie Peak area in central Wyoming, the area contains habitat quite similar to portions of the Black Hills. Additionally, the area frequently experiences wildfires, including three very large fires in the summer of 2012 (See Map). Black-backed Woodpeckers have an uncanny ability to find these large burns and dramatic increases in abundance have been documented in these habitats in other portions of the species range.

#### The Species:

Black-backed Woodpeckers are a relatively large woodpecker species. As the name suggests, the species has a diagnostic all-black back. Additionally, the head, wings, and tail are solid black. Males and young have a yellow crown while females have an all-black head. The chin, throat, breast, and belly are solid white. The sides and flanks are white with heavy black barring.

Visit [http://www.allaboutbirds.org/guide/Black-backed\\_Woodpecker/id](http://www.allaboutbirds.org/guide/Black-backed_Woodpecker/id) for more details on appearance, sound, and identification.

#### Similar Species:

Black-backed Woodpeckers are distinct in both sound and appearance. However, several other woodpecker species occupy the region and may be confused without careful observation. The most similar species in both appearance and habitat are American Three-toed Woodpeckers (*Picoides dorsalis*). American Three-toed Woodpeckers are slightly smaller and have a white, barred back and a white eyebrow. Other woodpecker species that occur in the area include: Hairy Woodpecker, Downy Woodpecker, Lewis's Woodpecker, Williamson's Sapsucker, Red-naped Sapsucker, Red-headed Woodpecker, and Northern Flicker.

You can find information about each of the species at <http://www.allaboutbirds.org>

#### Observation Instructions

We are encouraging birders to travel to these burned areas and search for this species. If observed, birders are asked to collect information on the form on page 7 and submit it online to [ebird.org](http://ebird.org). If preferred, forms may be mailed to:

UW Biodiversity Institute  
1000 E. University Ave., Dept. 4304  
Laramie, WY 82071



## Photo Guides

Adult male Black-backed Woodpecker



Adult female Black-backed Woodpecker



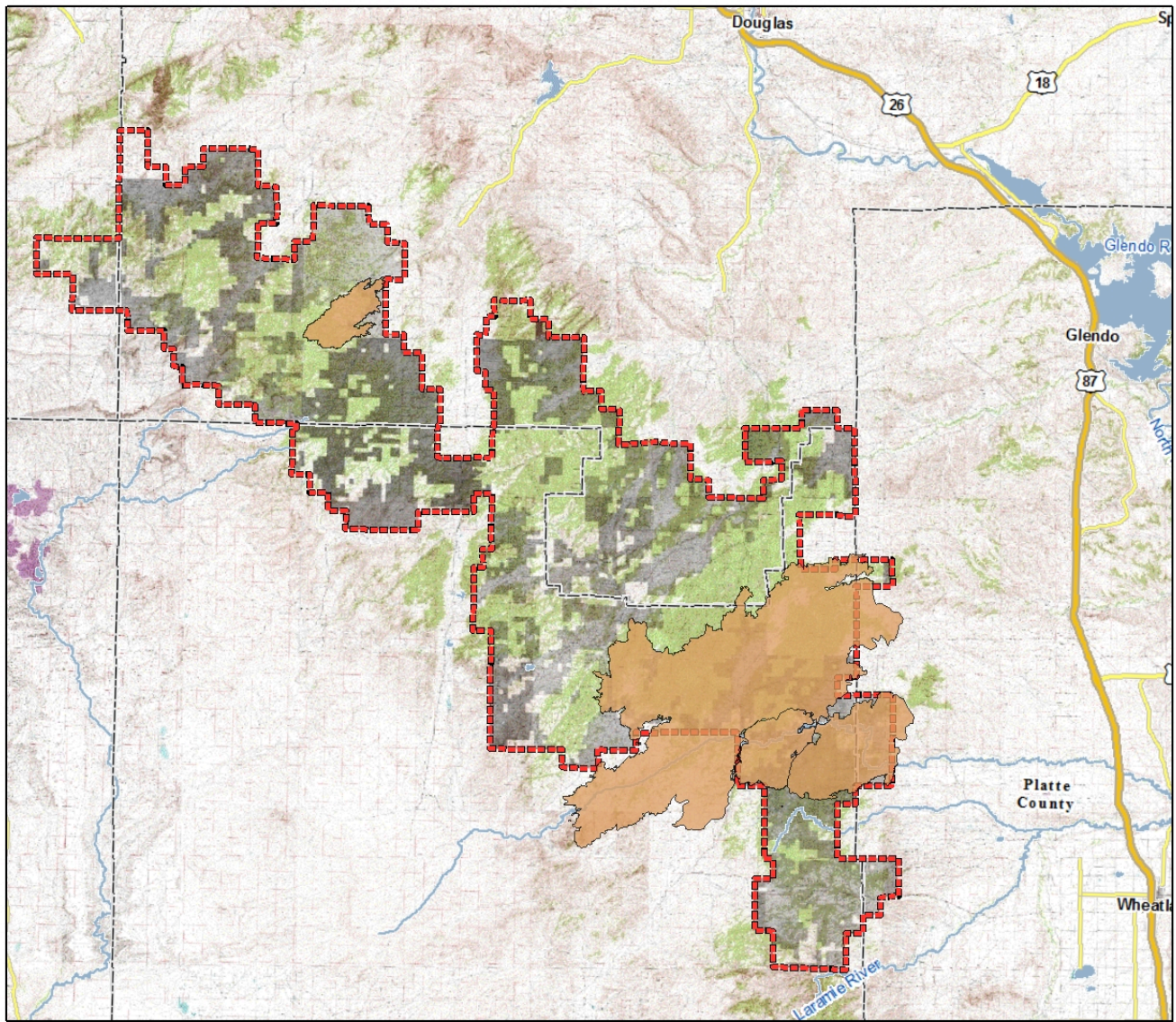
Ideal Black-backed Woodpecker Habitat (recently burned forest)



Visit [http://www.allaboutbirds.org/guide/Black-backed\\_Woodpecker/id](http://www.allaboutbirds.org/guide/Black-backed_Woodpecker/id) for more details on appearance, sound, and identification.



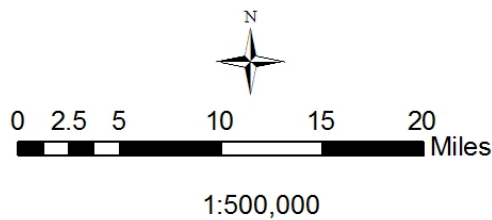
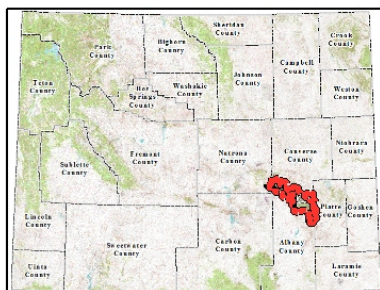
# Vicinity Map



The Laramie Peak Unit of the Medicine Bow National Forest experienced three large wildfires in 2012. These areas contain habitat similar to portions of the Black Hills, which hosts a unique population of Black-backed Woodpecker. These recent burns provide valuable habitat for many woodpecker species. Consider looking for Black-backed Woodpecker in these areas highlighted in orange in the map.

## Legend

- Recent Burned Areas
- Laramie Peak Unit



## Observation Form

Name \_\_\_\_\_

Address \_\_\_\_\_

Date you birded \_\_\_\_\_

Where were you birding (be as specific as possible)?

What time did you start birding?

What time did you stop birding?

Were you alone or with other people (if so, how many)?

Were you stationary or moving? If you were hiking or driving, how far did you travel while birding?

Did you play any recordings of birds to get a response or lure them in?

Did you see a Black-backed Woodpecker (yes or no – both are valid observations)? If yes, please mark the number observed below and provide a description of the bird.

How did you separate Black-backed Woodpecker from other, similar species? Provide as many details as possible.

*Observation form continued*

Which of the following species did you also see in the area (put an x next to them, or the number observed)?

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Dusky Grouse                   | <input type="checkbox"/> Steller's Jay           | <input type="checkbox"/> Virginia's Warbler     |
| <input type="checkbox"/> Wild Turkey                    | <input type="checkbox"/> Pinyon Jay              | <input type="checkbox"/> MacGillivray's Warbler |
| <input type="checkbox"/> Turkey Vulture                 | <input type="checkbox"/> Clark's Nutcracker      | <input type="checkbox"/> Common Yellowthroat    |
| <input type="checkbox"/> Golden Eagle                   | <input type="checkbox"/> Black-billed Magpie     | <input type="checkbox"/> American Redstart      |
| <input type="checkbox"/> Sharp-shinned Hawk             | <input type="checkbox"/> American Crow           | <input type="checkbox"/> Yellow Warbler         |
| <input type="checkbox"/> Cooper's Hawk                  | <input type="checkbox"/> Common Raven            | <input type="checkbox"/> Yellow-rumped Warbler  |
| <input type="checkbox"/> Northern Goshawk               | <input type="checkbox"/> Violet-green Swallow    | <input type="checkbox"/> Wilson's Warbler       |
| <input type="checkbox"/> Bald Eagle                     | <input type="checkbox"/> Black-capped Chickadee  | <input type="checkbox"/> Yellow-breasted Chat   |
| <input type="checkbox"/> Swainson's Hawk                | <input type="checkbox"/> Mountain Chickadee      | <input type="checkbox"/> Green-tailed Towhee    |
| <input type="checkbox"/> Red-tailed Hawk                | <input type="checkbox"/> Red-breasted Nuthatch   | <input type="checkbox"/> Spotted Towhee         |
| <input type="checkbox"/> Common Poorwill                | <input type="checkbox"/> White-breasted Nuthatch | <input type="checkbox"/> Chipping Sparrow       |
| <input type="checkbox"/> White-throated Swift           | <input type="checkbox"/> Pygmy Nuthatch          | <input type="checkbox"/> Lincoln's Sparrow      |
| <input type="checkbox"/> Broad-tailed Hummingbird       | <input type="checkbox"/> Brown Creeper           | <input type="checkbox"/> White-crowned Sparrow  |
| <input type="checkbox"/> Lewis's Woodpecker             | <input type="checkbox"/> Canyon Wren             | <input type="checkbox"/> Dark-eyed Junco        |
| <input type="checkbox"/> Williamson's Sapsucker         | <input type="checkbox"/> House Wren              | <input type="checkbox"/> Western Tanager        |
| <input type="checkbox"/> Red-naped Sapsucker            | <input type="checkbox"/> American Dipper         | <input type="checkbox"/> Black-headed Grosbeak  |
| <input type="checkbox"/> Downy Woodpecker               | <input type="checkbox"/> Golden-crowned Kinglet  | <input type="checkbox"/> Blue Grosbeak          |
| <input type="checkbox"/> Hairy Woodpecker               | <input type="checkbox"/> Ruby-crowned Kinglet    | <input type="checkbox"/> Lazuli Bunting         |
| <input type="checkbox"/> American Three-toed Woodpecker | <input type="checkbox"/> Mountain Bluebird       | <input type="checkbox"/> Western Meadowlark     |
| <input type="checkbox"/> Northern Flicker               | <input type="checkbox"/> Townsend's Solitaire    | <input type="checkbox"/> Orchard Oriole         |
| <input type="checkbox"/> American Kestrel               | <input type="checkbox"/> Veery                   | <input type="checkbox"/> Bullock's Oriole       |
| <input type="checkbox"/> Merlin                         | <input type="checkbox"/> Swainson's Thrush       | <input type="checkbox"/> Pine Grosbeak          |
| <input type="checkbox"/> Western Wood-Pewee             | <input type="checkbox"/> Hermit Thrush           | <input type="checkbox"/> Cassin's Finch         |
| <input type="checkbox"/> Least Flycatcher               | <input type="checkbox"/> American Robin          | <input type="checkbox"/> Red Crossbill          |
| <input type="checkbox"/> Hammond's Flycatcher           | <input type="checkbox"/> Gray Catbird            | <input type="checkbox"/> White-winged Crossbill |
| <input type="checkbox"/> Dusky Flycatcher               | <input type="checkbox"/> Cedar Waxwing           | <input type="checkbox"/> Pine Siskin            |
| <input type="checkbox"/> Cordilleran Flycatcher         | <input type="checkbox"/> Ovenbird                | <input type="checkbox"/> American Goldfinch     |
| <input type="checkbox"/> Plumbeous Vireo                | <input type="checkbox"/> Orange-crowned Warbler  | <input type="checkbox"/> Evening Grosbeak       |
| <input type="checkbox"/> Warbling Vireo                 |  |   |

Additional Species:

_____	_____
_____	_____
_____	_____
_____	_____

Miscellaneous notes:

**Submit this information**

**Online:** eBird.org (best method) – instructions will be available on the eBird website if needed.

**Mail:** UW Biodiversity Institute | 1000 E. University Ave., Dept. 4304 | Laramie, WY 82071



**BLACK-BACKED WOODPECKER**  
*Picoides arcticus*

*November 15, 2012*

**LEGAL STATUS**

USFWS: Candidate (Black Hills population) (1)  
USFS R2: Sensitive (2)  
USFS R4: No special status  
Wyoming BLM: No special status  
State of Wyoming: Protected Bird (3)

**CONSERVATION RANKS**

USFWS: No special status  
WGFD: NSSU (U), Tier II (4)  
WYNDD: G5, S1-S3  
Wyoming Contribution: LOW  
IUCN: Least Concern (5)  
PIF Score (2012): 10; Stewardship Species (6)

**STATUS AND RANK COMMENTS**

The isolated population of Black-backed Woodpecker in the Black Hills of South Dakota and Wyoming, along with the isolated populations of Oregon and California, were petitioned for protection under the Federal Endangered Species Act in May of 2012. There are no other special legal status considerations. Black-backed Woodpecker is assigned a range of S-ranks by WYNDD due to uncertainties in the population trend of the



*Figure 1. Ideal Black-backed Woodpecker habitat. Burned forest from the 2009 Arnica Fire, in Yellowstone National Park, 1 year post-burn. (Photo courtesy of William Romme)*



*Figures 2a & 2b. Adult Black-backed Woodpeckers, male (top) and female (bottom), in New Hampshire. Photos courtesy of Glen Tepke, <http://www.pbase.com/gtepke/profile>*

species. WYNDD assigns an S-rank of T1B to the Black Hills population, with a very high Wyoming contribution. This is the result of the localized distribution of the population, with a significant portion of that population in Wyoming.

**NATURAL HISTORY**

**Taxonomy:** There are currently no recognized subspecies of Black-backed Woodpecker (7). Recent genetic evidence suggests subspecies designation may be warranted for the

population in the Black Hills of Wyoming and South Dakota (8).

**Description:** Identification of Black-backed Woodpecker is possible in the field. It is a mid-sized black-and-white woodpecker, similar in size and shape to Hairy Woodpecker (*Picoides villosus*) (9, 10). Males and females differ in plumage. In both sexes, adults have a solid black head, back, wings, and tail; a solid white chin, throat, breast, and belly; and heavy barring on the sides and flanks. Males have a solid yellow cap, which is absent in females (9). Juveniles are similar in appearance to adults, but are duller overall, have a reduced or absent yellow crown patch, and slightly buffy underparts (7, 10). The species has only three toes on each foot, two directed forward, and one directed backward, while most other species of woodpeckers have four toes (7). It is most easily confused with American Three-toed Woodpecker (*P. dorsalis*) in its range. Black-backed Woodpecker can be identified by the all black back, while the back of the American Three-toed Woodpecker is white. Additionally, the American Three-toed Woodpecker has a narrow white eyebrow extending from the eye down to the back,



Figure 3: North American range of *Picoides arcticus*. Map courtesy of The Birds of North America, Online.

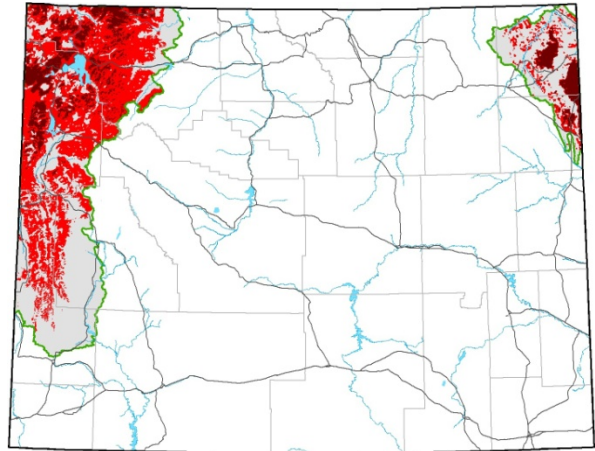


Figure 4: Range and predicted distribution of *Picoides arcticus* in Wyoming. (Map from Keinath et al, 2010) (11)

which is lacking in the Black-backed Woodpecker (9, 10). Downy Woodpeckers (*P. pubescens*) and Hairy Woodpeckers (*P. villosus*) are also similar looking species, but both of these species have large white patches on their backs, lack barring on their sides, and males have red patches on the back of their heads (9).

**Distribution:** Black-backed Woodpecker is distributed across the boreal region of northern North America, and extends south into the Cascades, Sierra Nevada, and the northern Rocky Mountain region into northwestern Wyoming. There is a disjunct population in eastern Wyoming and western South Dakota in the Black Hills. The species is non-migratory, though irruptions may occur in winter to the south of its normal range (7).

**Habitat:** The Black-backed Woodpecker is restricted to mature, fire regulated, boreal and coniferous forests, which include the combination of decadent trees, snags, and fallen logs the species requires (12). The species composition of these forests varies across Black-backed Woodpecker range. In Wyoming, habitat includes mature forests dominated by spruce (*Picea* spp.), Douglas Fir (*Pseudotsuga menziesii*), Ponderosa Pine (*Pinus ponderosa*), and Lodgepole Pine (*P. contorta*) (7). Generally, the species is considered uncommon to rare in these habitats. However, local increases may occur



in response to beetle outbreaks and fires (12). These beetle-killed and burned trees, as well as decadent trees, snags, and dead wood, provide abundant wood-boring beetle larva, which the woodpecker depends upon (12). In the Black Hills of Wyoming, the species is largely restricted to burned habitats (13, 14). Elsewhere in its range, the species is strongly tied to unaltered areas burned within the previous four years (15-24).

Phenology: The Black-backed Woodpecker is resident in its habitat. In winter, the species is infrequently found south of its normal range. Excavation of the nest cavity typically occurs in April and May. Egg laying is thought to occur between late April and early July. In Oregon, incubation was observed between late May and early June. Fledging was observed in Idaho at about 24 days of age, and departure from the nest occurred between early June and early July, while in Oregon young left the nest as early as mid-June (7).

Diet: The Black-backed Woodpecker feeds primarily upon larvae of wood-boring beetles in the families Cerambycidae and Buprestidae, engraver beetles, and mountain pine beetles (*Dendroctonus ponderosae*) (7). The woodpecker also consumes spiders, ants, wood-boring caterpillars, other insects, fruit, and mast (13).

### CONSERVATION CONCERNS

#### Abundance:

National: WIDESPREAD

Wyoming: RARE

In Wyoming, the Black-backed Woodpecker is only found in the Black Hills region and the northwestern part of the state. No current population estimates are available for either of these regions.

#### Population Trends:

Historic: STABLE

Recent: UNKNOWN

Population trends in Wyoming are unknown. Current monitoring programs are inadequate for monitoring woodpecker species in the state (25, 26).

#### Intrinsic Vulnerability:

MODERATELY VULNERABLE

The Black-backed Woodpecker is a fire-dependent species, utilizing the abundance of wood-boring beetles on fire-killed or fire-damaged trees for foraging, and the trees for cavity excavation (12). The species creates new cavities for each breeding season (7).

#### Extrinsic Threats:

MODERATELY THREATENED

The Black-backed Woodpecker relies on fire killed forests and trees for breeding and foraging habitat. Fire suppression threatens the long term persistence of this species across its range, including in Wyoming (7, 15, 17-19, 21, 27-29). Additionally, salvage logging in burned and beetle-killed areas threatens this species by removing dead trees that could be used for cavities and foraging (12, 16, 18, 20, 23, 30-34).

### KEY ACTIVITIES IN WYOMING

Annual Breeding Bird Surveys occasionally detect the Black-backed Woodpecker in Wyoming. These data are too limited to produce abundance estimates and population trends (25). Similarly, the Integrated Monitoring in Bird Conservation Regions program (formerly Monitoring Wyoming Birds program) reports few detections of the species in the state (26). Research focusing on demography and habitat use by the species in burned and beetle killed forests is being conducted in the Black Hills region (35). Also in the Black Hills, the U.S. Forest Service will be monitoring birds in 2013, with the goal of getting a density estimate of the Black-backed Woodpecker (36). Recent genetic work suggests that Black-backed Woodpeckers in the Black Hills region of Wyoming and South Dakota may merit subspecies designation (8). Because of this and threats to the species in the area, this population has been petitioned for protection under the Endangered Species Act (1).

**INFORMATION GAPS**

Increased knowledge of differential habitat use, if any, between the edges of burn habitats and the interior of burn habitats is needed (12). Basic demography is largely unknown (7). Knowledge on the over-wintering bonds of families is needed (12). Knowledge on the dispersal of the species after using beetle-killed forests, and fire-killed forests, is needed (12). Abundance estimates and population trends across the species range and in Wyoming are needed.

**ABSTRACT DOCUMENTATION****Authors:**

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 Douglas A. Keinath, WYNDD

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**Available online:**

<http://www.uwyo.edu/wyndd/>

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