

# HACKBERRY



## WILDERNESS PROPOSAL



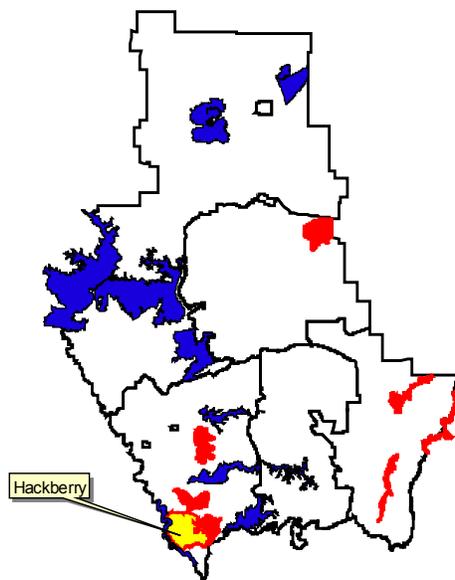
Arizona Wilderness Coalition  
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# Coconino National Forest

Coconino Rim



## **Introduction**

The Arizona Wilderness Coalition (AWC) presents this 17,872-acre wilderness proposal of Hackberry Inventoried Roadless Area (IRA) to be reviewed during the Coconino National Forest's 2006 Land Management Plan revision process. A review of the RARE II findings shows that the Forest Service determined Hackberry to have a high overall wilderness attribute rating (USDA, 1978 [RARE II DES, Appendix, Section II, page 3a]). The Forest Service adopted a very confined interpretation of Section 2 (c) of the Wilderness Act in its wilderness evaluation process potentially the reason Hackberry was not selected for wilderness recommendation. Testimonies during the formation of The Endangered American Wilderness Act have accused the Forest Service of applying overly restrictive wilderness evaluation standards (The Wilderness Society, 2000). A recent citizen's inventory has produced evidence that Hackberry IRA does in fact meet the wilderness suitability criteria defined by the 1964 Wilderness Act and if designated wilderness the area could be a valuable core area for sustaining wildlife and ecosystems.

In this proposal, the AWC describes the wilderness characteristics, as defined by the Wilderness Act of 1964, of Hackberry IRA that qualifies the unit to be designated as Wilderness. The Wilderness Characteristics section also includes Supplemental Values such as the geological, ecological, and historical significance of Hackberry. The AWC has also reviewed and documented routes within Hackberry and has included recommendations for road management.

## **Wilderness Review Mandates**

During the Region 3 Forest Planning of 1984, the Forest Service recommended a slew of wilderness areas to Congress for designation. The Arizona Wilderness Act of 1984 designated 32 new wilderness areas on Forest Service land totaling 762,400 acres (Arizona Wilderness Act, 1984). Under section 103(b)(2) of the 1984 Arizona Wilderness Act, specific language directs the Department of Agriculture to reconsider wilderness designation of lands that were reviewed under the Roadless Area Review and Evaluation II (RARE II) but not designated wilderness at that time. The specific soft release language, as it is known, under section 103(b)(2) is as follows:

“..with respect to the national forest system lands in the State of Arizona which were reviewed...in the second roadless areas review and evaluation...the Department of Agriculture shall not be required to review the wilderness option prior to the revision of the plans, but shall review the wilderness option when the plans are revised, which revisions will ordinarily occur on a ten-year cycle, or at least every fifteen years, unless, prior to such time the Secretary of Agriculture finds that conditions in a unit have significantly changed.” (Arizona Wilderness Act, 1984)

This specific section of the 1984 Arizona Wilderness Act requires that the Forest Service

reconsider inventoried roadless areas for recommendation as wilderness.

Further, within the Forest Service manual under land management planning section 1923 there is non-binding guidance regarding wilderness review. The first line of the description of section 1923 states “Consideration of wilderness suitability is inherent in land management planning” (USDA, 2006 [FSM 1900, Chapter 1920, Section 1923, page 42]). While this does not obligate the Forest Service to make wilderness recommendations it does compel them to evaluate potential wilderness areas every time a forest plan is reviewed or amended.

Again, within the Forest Service Manual (2006) under policy of wilderness areas section 1923.03, number 2 it states:

“2. Unless otherwise provided by law, all roadless, undeveloped areas that satisfy the definition of wilderness found in section (2) of the Wilderness Act of 1964 should be evaluated and considered for recommendation as potential wilderness areas during the plan development or revision.”

This excerpt from the Forest Service Manual clearly instructs the Forest Service to ‘evaluate and consider’ all appropriate IRA’s, which were formed through RARE II, for wilderness proposal.

### **Unit Description**

Hackberry IRA is located in the southern portion of the Coconino National Forest in Yavapai County. The area is characterized by rugged topography with a mix of pinyon juniper and scrub oak chaparral vegetation. Elevation within Hackberry proposed wilderness ranges from 3,600 to 5,800 feet, allowing the potential users to experience a variety of micro-habitats and vegetation variations.

The Hackberry proposed wilderness unit lies in the Central Mountains Province, beneath the Colorado Plateau and above the Basin and Range Area. Within the Central Mountains Province one can find characteristic rugged mountains composed of igneous, metamorphic, sedimentary, and volcanic rocks of Proterozoic age with the occasional erosional remains of the Paleozoic period (Nations, 1981). The proposed wilderness area would also protect significant geologic features such as Hackberry Mountain, Towel Peaks, Towel Creek, Bull Run Creek and Sycamore and Hackberry Canyons and numerous springs that allow for the wide diversity of wildlife found in this area.

Hackberry Inventoried Roadless Area, Forest Service # 03044, was established under the Roadless Area Review and Evaluation II (RARE II), which was completed in 1979 (Hendee and Dawson, 2002).

## **Wilderness Characteristics**

### Size

The proposed Hackberry wilderness is 17,872 acres. This exceeds the size requirements established by the Wilderness Act of 1964.

### Naturalness

To qualify as Wilderness, an area must be substantially natural where the imprint of man cannot dominate (Wilderness Act, 1964). The inventories of Hackberry show the area appears to have been primarily affected by the forces of nature with the imprint of man substantially unnoticeable. A visitor within the area can experience the inherent naturalness of the unit's washes, hills, and canyons where the primary force is the weathering of time. Within the majority of the unit, the visitor is immersed in natural landscape and serene silence. The natural quality of Hackberry would make it ideal addition to the National Wilderness Preservation System.

### Opportunity for Solitude

Hackberry proposed wilderness is of sufficient size and shape to offer abundant opportunities for solitude. Composed of almost 18,000 acres, Hackberry is generally a consolidated shape providing a sanctuary for solitude within the center of the area. The mountainous topography acts not only as a barrier from external non-natural influences but also as dividers within the area itself. A person seeking solitude can easily find it within the many ravines, creeks, and isolated mountains within Hackberry. Various vegetative types within the proposed wilderness area assist the topography in providing solitude. In the higher elevations one can seek solitude amongst the many high peaks while the scrub oak and chaparral of the lower elevations allow for an expansive view giving the feeling of solitude. Lastly, a visitor can find seclusion along the various creek beds amongst tall cottonwoods and willows.

### Primitive and Unconfined Recreation

The topography and climate of Hackberry combine to offer near endless types of primitive and unconfined recreation. The western portion of the area, which abuts the Wild and Scenic Verde River, offers riparian and flood plain ecotypes. Visitors can experience majestic wildlife such as Bald Eagles or take a refreshing dip in the Verde River. The central and southern portions, containing many of the higher elevations, offers cooler temperatures during the hot summer months and opportunities for snow and ice recreation during the winter. A few examples of recreation types that Hackberry would lend itself to are hiking, backpacking, horseback riding, rock climbing, bird watching, wildlife viewing, hunting, cross-country skiing, snow shoeing, orienteering, and many others. Due to its seclusion from population centers Hackberry also offers excellent star gazing at night.

## Supplemental Values

Supplemental values are referenced in section 2(c)(4) of the Wilderness Act and refer to values such as ecological, geological, or other features of scientific, educational, scenic, or historical value.

### Geological

The Hackberry Roadless Unit lies within the Transition Zone, which is an area between the Basin and Range geology to the south and the Colorado Plateau bordering the north (Nations, 1981). One can study the geologic influence of both areas within the Transition Zone such as faulting and erosion that has carved canyons, valleys, and mountains. Sedimentary Gabbro was formed from ancient oceans over 1.8 billion years ago and under lays portions of Hackberry roadless area. One can also find evidence of Tapeats Sandstone, Martin Limestone, and Redwall Limestone all from the Paleozoic era and also found in the Grand Canyon. The higher elevations of Hackberry are capped with the volcanic Hickey Formation having been formed as recently as 18 million years ago (Zion National Historic Association, 1975).

The geologic time span of the rocks found in Hackberry provides a classroom in the wild for geologists and others interested in Earth's history.

### Ecological

Ecosystem fragmentation caused by urbanization is considered the number one threat to the biodiversity of the region and is not expected to diminish during our lifetimes (Kaufman & Franz, 1996). The designation of Hackberry as wilderness would help reduce ecosystem fragmentation by protecting it from becoming roaded and further developed. Designating Hackberry IRA as wilderness will also create a larger wild land complex including Mazatzal, Cedar Bench, Fossil Creek, Pine Mountain and West Clear Creek Wilderness areas. This large wild land complex will help sustain suitable habitat for large predators as well as facilitate healthy, functioning ecosystems (Foreman, 2005).

Hackberry provides habitat for many mammals, insects, reptiles, and amphibians. The hilly terrain provides an abundance of microhabitats on north and south slopes and shaded canyons. Vegetative communities located within the unit form a dense cover on erosion-prone hillsides, which helps to protect watersheds. The vegetation within Hackberry can easily withstand drought, and is highly adapted to fire (Lowe, 1964).

Pinyon juniper forest provides a key habitat for pinyon jays (*Gymnorhinus cyanocephalus*). Also, the mountainous terrain provides ideal habitat for large mammals such as coyotes (*Canis latrans*), black bear (*Ursus Americanus*), bobcat (*Lynx rufus*), and mountain lion (*Puma Concolor*). The riparian creeks and canyons within the Hackberry unit are ecologically significant. Riparian areas, which exist on less than 2% of the land in Arizona, are critical habitat in the desert Southwest that helps to sustain

healthy populations of fish and wildlife (Baker et al, 2004). Designating Hackberry as wilderness would help to protect these sensitive areas.

### Scenic

Hackberry proposed wilderness offers a plethora of scenic opportunities. From the higher elevations one can find views looking north into the Verde Valley and beyond to the San Francisco peaks or to the west looking over the Verde River all the way to Cedar Bench Wilderness on the Prescott National Forest. The smaller hills and valleys of the unit provide an intimate feel while imparting wildlife viewing opportunities.

### Historical

Hackberry has pre-historical sites strewn throughout its boundaries. Evidence of Native American cultures is found in the form of rock art sites, dwellings, knapped stone fragments and pottery shards. Wingfield Mesa, located just north of the roadless area boundary, is estimated to have near 100 pre-historical sites (Harris, 2000).

### Manageability

The size, topography, and location of Hackberry proposed wilderness make it feasible to manage it “..for the use and enjoyment of the American people in such manner as will leave them (public lands) unimpaired for future use as wilderness..” (Wilderness Act, 1964).

Encompassing over 17,870 acres, Hackberry is large enough that it “..has natural integrity or appears to be natural and free from disturbance so that the normal interplay between biotic species inhabiting the area continues” (USDA, 2005). The size of the unit also prohibits external influences from penetrating the inner portions.

The varied topography will inhibit many forms of illegal activity such as motorized travel, commercial wood harvesting, or development making managing the wilderness resource less problematic.

Hackberry’s location makes it an ideal compromise between accessible and remotely protected. Located south of the Verde Valley towns of Camp Verde, Cottonwood, Clarkdale, and Jerome, Hackberry proposed wilderness would offer opportunities for recreation and provide clean water and air for these rapidly growing population centers as well as towns and cities to the south and east such as Cave Creek, Pine and Strawberry . The main access points to Hackberry are from Forest Service road 708 (Fossil Creek road) and Forest Service road 502 to the south of the area.

### Resource Opportunity Cost

Hackberry IRA does have minimal potential resource uses that would be incompatible with wilderness designation, but the benefits of wilderness designation compensate for loss of use. The following is a brief analysis of the benefits and detriments to resource opportunities if Hackberry IRA is designated as wilderness. The data used for this analysis came from the Arizona Supplement to the Draft Environmental Statement for the Roadless Area Review and Evaluation II (RARE II) (USDA, 1978).

Growing Stock (MMBF)

Hackberry was reviewed by the Forest Service and was determined to have 0.0 MMBF (All growing stock, hard and soft wood). Clearly, if Hackberry was designated wilderness and commercial, mechanized wood harvesting was limited or prohibited all together there would be negligible economic loss.

Animal Use Month (MAUM)

The Forest Service determined that Hackberry has 3.6 MAUM. Though wilderness designation would not prevent livestock grazing it would limit ranchers to non-motorized management.

Dispersed Non-Motorized and Motorized Use (MRVD)

The Forest Service’s review concluded that Hackberry IRA is better suited to non-motorized recreation versus motorized recreation. While Hackberry was determined to have 0.6 MRVD for non-motorized recreation it was also determined to have 0.0 MRVD for motorized recreation. By designating Hackberry wilderness there would be negligible effect on motorized recreation save for a few potential unauthorized motorized routes. Furthermore, the lure of prohibition on motorized recreation might increase the number of non-motorized recreationists enjoying Hackberry proposed wilderness.

Energy and Mineral Production

Figure 1 displays what producing, proven and possible mineral and energy potential Hackberry IRA has.

<b>Minerals and Energy</b>	<b>Yes or No</b>
Critical Minerals	No
Non-Critical Minerals	No
Oil/Gas	No
Geothermal	No
Uranium	No
Coal	No

Figure 1- Producing, Proven and Possible Mineral and Energy Resources in Hackberry IRA

Clearly, the Forest Service has established that Hackberry possesses no current or possible significant mineral and energy resources. Therefore, wilderness designation would not affect mineral and energy development in Hackberry.

**Historical Review**

The US Forest Service evaluated Hackberry in the RARE II process and concluded that the unit possesses a wilderness attribute rating of 22 on a scale of 4-28, 28 being the highest. Hackberry Inventoried Roadless Unit was recommended as Wilderness

for alternatives I, and J and was recommended for Further Planning or Non-Wilderness for alternatives B, C, D, E, F G, H. and (USDA, 1978).

**Alternative B:** *Allocates all inventoried areas to non-wilderness units*

**Alternative C:** *Wilderness would be clustered on the Prescott and Apache-Sitgreaves National Forests.*

**Alternative D:** *Allocates to wilderness Arizona's share of the areas that have composite wilderness attribute ratings in the top 40 percentile of all areas within the region.*

**Alternative E:** *Selects for wilderness, Arizona's share of the South-western Region's planning assignments or targets required to meet the minimum level, level I, of a National Wilderness Preservation System. All other areas are allocated to non-wilderness.*

**Alternative F:** *Allocates to wilderness Arizona's share of the South-western region's planning assignments or targets, sufficient to meet Level I for landform representation and wilderness associated wildlife and Level II for ecosystem representation developed for National Wilderness Preservation System.*

**Alternative G:** *Allocates to wilderness Arizona's share of the Southwestern Region's planning assignments or targets required to meet the moderate level or level II of the National Wilderness Preservation System. Areas were selected that would meet level II targets assigned to the Region for landform and wildlife habitat and level III for ecosystem representation.*

**Alternative H:** *Considers Regional trade-offs, social and economic effects, public interest in specific areas, industrial needs, state and local government positions, and the prospective resource management program on National Forest lands.*

**Alternative I:** *Addresses the issue of additional designated wilderness and provides a reasonable distribution of wilderness areas within the Region and in Arizona.*

**Alternative J:** *Does not satisfy Regional or State issues related to commodity production and the availability of resources for uses other than Wilderness.*

Alternative Descriptions as Stated in the RARE II Supplement to Draft Environmental Statement Roadless Area Review and Evaluation

It is unclear why Hackberry IRA, having such a high wilderness attribute rating, was not recommended for wilderness designation. Other roadless areas such as Fossil Creek, San Francisco Peaks and Kendrick Mountain had equal or lower wilderness attribute ratings yet did receive wilderness recommendation. New information derived from a recent citizen's inventory reveals that Hackberry IRA meets the 1964 Wilderness Act's wilderness criteria and should be designated as such to receive full protection from exploitation of its land.

## **Conclusion**

Designating Hackberry IRA as Hackberry Wilderness would protect and preserve a vital and increasingly scarce large plot of undeveloped public land. The addition of Hackberry to the National Wilderness Preservation System would facilitate a healthy, sustainable wild land complex benefiting ecosystems, wildlife and the citizens of Arizona

and the United States. Wilderness designation of Hackberry would promote sources of clean air and clean water and provide remarkable recreational opportunities for residents of the Verde Valley as well as nearby forest towns such as Pine and Strawberry. Hackberry IRA meets all the Wilderness requirements listed in section 4 (c) of the Wilderness Act, including optional Supplemental Values such as the geological, ecological and historical significance of Hackberry. The documentation provided here is a valid claim for recommending Hackberry as Wilderness in the planning process. Encroaching development and off road vehicle use threaten the Wilderness Characteristics of Hackberry. The AWC believes that the best management decision for this unit is wilderness protection

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Zion National Historic Association, 1975.

## Route Analysis

**Route #:** 1 (FSR 708)

**Photos:** FC-1 thru 8

**Length:** approximately 14 miles

**Construction Type:** Cut and Fill, Bladed.

**AWC Inventory Observed Status:**

Open (Level 3)

**Campsites:** Multiple (>4)

**Vehicle Type:** Passenger vehicle

**Erosion:** Minimal

**Vegetation Present:** Bare soil > 50% of surface

**Observed Uses:** Recreation (non-motorized & motorized, hunting, river access, equestrian), forest travel (town to town), ranching access.

**Proposed Action:** Keep open

**Notes:** A highly used forest road, 708, serves many purposes and therefore should remain open and maintained.



**FC-1** Beginning of Route FC-A (FSR 708) at the junction with highway AZ-260.

Photo Direction: E



**FC-2** Point at which route FC-A (FSR 708) begins to parallel Hackberry IRA on its northeast boundary. Photo is taken just north of Sycamore Canyon which creates the roadless areas northern boundary.

Photo Direction: E



**FC-3** Average condition of route FC-A. Needle Rock, seen as the smaller peak right of center, is a prominent and unique geologic feature with the Hackberry proposed wilderness.

Photo Direction: S



**FC-4** Junction of FC-A (straight in photo) and route leading to Phroney Spring (right in photo). Multiple campsites are located on this short route. Photo Direction: S



**FC-6** Average conditions of route FC-A at Cimarron Saddle. South from this location route FC-A (FSR 708) travels between Hackberry IRA on the west and Boulder Canyon IRA on the east. Photo Direction: SE



**FC-5** Junction of FC-A (straight in photo) and road leading to private property (right in photo) near Hackberry Springs. Private property road has a gate that is usually closed and locked. Hackberry Mountain (5,831 ft), the tallest peak within the proposed Hackberry Wilderness, can be seen in the upper right of the photo. Photo Direction: S



**FC-7** Junction of FC-A (straight in photo) and unsigned road leading to Sally May Wash (left in photo). Photo Direction: N



**FC-8** End of route FC-A at junction with FSR 502 (right in photo). FSR 708 continues straight in photo.  
Photo Direction: N

**Route #:** 2 (FSR 500)

**Photos:** EC-1 thru 6

**Length:** approximately 5.5 miles

**Construction Type:** Cut and Fill, Bladed.

**AWC Inventory Observed Status:**  
Open (Level 2)

**Campsites:** 2 (rarely used)

**Vehicle Type:** 2 WD High Clearance

**Erosion:** 15+ inches

**Vegetation Present:** Bare soil > 50% of surface

**Observed Uses:** Recreation (non-motorized & motorized, hunting, river access, equestrian), ranching access.

**Proposed Action:** Close portion, rest of route should remain open.

**Notes:** The last two miles of the southwestern portion of the road are closed from 12/1-6/30 every year for Bald Eagle nesting. This last portion of the road should be converted to non-motorized permanently and be open for non-motorized travel 7/1-11/30. FSR 9242, located north of FSR 500, has been converted to non-motorized for its western portion and could act as an example for the proposed action on FSR 500.



**EC-6** Beginning of route EC-A (FSR 500) at the junction with FSR 708.  
Photo Direction: W



**EC-5** Erosion on route EC-A up to 12 inches.  
Photo Direction: SW



**EC-4** Drainage with severe erosion (10 feet) on west side of route EC-A. Route EC-A crosses top of photo left to right.



**EC-1** Closure gate for Bald Eagle breeding season (12/1-6/30). AWC's recommendation is for the route to become non-motorized from this point permanently.



**EC-2** Erosion on route EC-A up to 15 inches.