Wilderness Awareness Workshop

# Case Study Discussion - Research

**1. Issue:** Should Chiricahua ground squirrel research be allowed in the Sky Islands Wilderness?

**2. Situation:** Researchers from the University of Arizona want to install a permanent (10 year) study plot in the Sky Islands Wilderness, to study the effects of the Saguaro Fire on the Chiricahua ground squirrel. They would like to determine if their population will increase or decrease as a result of the fire. Chiricahua ground squirrels are common animals living both inside and outside of the Wilderness. Researchers desire to study the effects inside the wilderness because there are fewer influences over population effects, since wilderness is managed to preserve natural conditions. Because the plot locations would be located deep inside the wilderness, requiring a 10 mile hike over steep and rugged terrain in the middle of the summer (where temperatures commonly reach 100 degrees or more), they have requested that their gear, equipment, and materials be transported in and out by helicopter. Researchers would hike in and out. They would establish a camp that would be occupied on and off, for eight months of the year (March through October). Four researchers would be at the camp at any one time. Their gear includes camping gear, food and water, research instruments, a GPS unit, non-motorized equipment to install the fence, and metal posts and wire to mark the plots. It is estimated to weigh about 500 pounds, which would supply them for the entire 9 months.

**3. Management Question(s):**

a) Is management action necessary in wilderness to do Chiricahua ground squirrel research?

b) IF management action is necessary, what is the minimum necessary method and tool?

- OR -

What method or tool should be used to minimize impairment or degradation of the wilderness resource, character and values?

**4. Direction/Guidance:**

**a. What does the Wilderness Act and subsequent legislation say?**

 Section 2(a) . Purpose of wilderness:

* to insure that a growing population and increasing mechanization does not occupy and modify all areas leaving no lands in their natural condition
* to secure for the American people of present and future generations the benefits of an enduring resource of wilderness

 Wilderness shall be administered :

* + in such manner as will leave them unimpaired for future use and enjoyment as wilderness to provide for the protection of these areas
	+ for preservation of their wilderness character
	+ for the gathering and dissemination of information regarding their use and enjoyment as wilderness;

Section 2(c) Definition of wilderness:

* an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain.
* land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable
* has outstanding opportunities for solitude or a primitive and unconfined type of recreation
* is to be preserved in an unimpaired condition
* may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Section 4(b) Purpose of wilderness

“wilderness shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.”

Section 4 (c) Prohibition of certain uses

 “except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act ….there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area.”

**b.What is your agency policy?**

See Agency Policy Handout for direction regarding minimum requirements and the use of motorized equipment, landing of aircraft, etc. in wilderness.

2324.4 - Research in Wilderness

2324.41 - Objective. To provide appropriate opportunity for scientific studies that are dependent on a wilderness environment.

2324.42 - Policy

 1. Encourage research in wilderness that preserves the wilderness character of the area (FSM 2320.3).

 2. Identify wilderness management or national issues that may require research in forest plans.

 3. Review proposals to conduct research in wilderness to ensure that research areas outside wilderness could not provide similar research opportunities. Direct projects that would jeopardize wilderness values to areas outside wilderness.

 4. Review research proposals to conduct research in wilderness to ensure that research methods are compatible with wilderness values. Do not allow the use of motorized equipment or mechanical transport unless the research is essential to meet minimum requirements for administration of the area as wilderness and cannot be done another way (sec. 4(c) the Wilderness Act). Include specific stipulations in the approval document.

 5. Except for studies that clearly require contact within wilderness, allow interviews or direct contact with visitors only outside wilderness.

 6. Permit scientific study of cultural resource sites/areas consistent with the direction in FSM 2323.8.

 **c. What does your unit plan or wilderness plan say?**

1. **What are your management options?**

Remember to split this minimum requirements decision making process into two parts:

 Step 1 – Is any administrative action necessary?

 Step 2 – If action is necessary, what is the minimum tool/method that will cause the least

 Impairment or degradation of the wilderness resource and character?

 **Step 1**: Is administrative action necessary in wilderness to do research on Chiricahua ground squirrels?

 ***Use the Minimum Requirements Decision Guide (MRDG)handout and the***

 ***questions listed for Step 1 to assess the issue presented in this case study.***

Based on an analysis of law, agency policy, other valid rights, and possible other non-wilderness mitigations of the problem, is it necessary to take **any** management action in wilderness to address the issue and resolve the problem?

\_\_\_\_ YES \_\_\_\_\_ NO Why?

If the answer is NO, stop the minimum requirements analysis here.

If the answer is YES, summarize the rationale and proceed to Step 2 of the MRDG.

**Step 2:**If action is necessary, what is the minimum tool/method that will cause the least degradation

 or impairment of the wilderness resource, character, and values?

 ***Use the Minimum Requirements Decision Guide (MRDG) handout and the***

 ***questions listed for Step 1 to assess the issue presented in this case study.***

Identify possible alternatives which include both methods and tools. Can you think of additional, less intrusive methods or tools that should be considered?

 ***Note – possible or real alternatives for the case study can be listed here or the participants can be***

 ***prompted to develop them.***

A. No action

B.

C.

D.

Are any other alternatives feasible?

**6. What is your decision?**

Include necessary mitigation measures here.

**7. What is the rationale for your decision?**

The rationale should link the decision made to wilderness management objectives, law, policy, unit plan standards and guidelines, etc. and exlain how this decision best protects the wilderness character while addressing the problem in a feasible manner.

1. Was it necessary to take any action?
2. If so, was the action chosen the minimum necessary to meet stewardship goals?

 c) If so, were the tools used the “minimum necessary to accomplish the chosen action

**8. What additional constraints are necessary to minimize disturbance to the wilderness resource and character?**

 Timing, location, or frequency of activity?

 Maintenance requirements?

 Standards or design requirements?

 Monitoring?