"A scientific research permit allows scientists to do things that the average visitor is prohibited from doing in a national park. With special permissions, come special responsibilities."

From the publication Environmentally Sensitive Field Research in Yellowstone National Park. 2005.

The Wilderness / Science Bond

Everglades National Park was authorized in 1934 for the express purpose of preserving the unique natural conditions that have helped define the area over centuries. Under the Wilderness Act of 1964, Congress designated the majority of the park as a formal wilderness area in 1978. Subsequently renamed the Marjory Stoneman Douglas (MSD) Wilderness, this designation affords roughly 86 percent of the park the highest level of legal protection possible.

Proper management of the MSD Wilderness, and all areas of Everglades National Park, requires high quality scientific information spanning a wide variety of disciplines. Efforts to restore the remnant Everglades have augmented the need for a more complete understanding of south Florida's natural systems. As a contiguous landscape of great ecological integrity, the MSD Wilderness remains an important area for scientific inquiry.

Wilderness and science share a reciprocal bond. Science often yields important insights that help secure the long-term preservation of wild places for future generations. Conversely, designated wilderness serves to protect vast natural laboratories free from significant modification. For over 30 years, the MSD Wilderness has served as a touchstone against which to gauge changes elsewhere in south Florida. Everglades National Park encourages the continued use of this area for scientific inquiry in pursuit of preservation.

Understanding Prohibited Uses

Though the Wilderness Act acknowledges the role of science in such areas, it also clearly articulates the intended purpose of designated wilderness and bestows a legal responsibility on managers to maintain the wild, primeval nature of such areas. The act identifies a suite of uses that are generally incompatible with the purposes of wilderness. Prohibited uses include:

- The landing of aircraft
- The use of motorized equipment or motorboats
- The construction or installation of structures or equipment
- The use of motor vehicles
- The use of mechanized transport (bicycles, wheelbarrows)
- Permanent or temporary roads.

The untamed MSD Wilderness can be a difficult subject of study. The vast, inundated landscape often makes access difficult and gathering data challenging. Still, such hardships may not justify the allowance of prohibited uses. In evaluating research proposals, the preservation of wilderness values and character is given substantially more weight than matters of economics, efficiency, or convenience. Scientists wishing to conduct research in the MSD Wilderness must not only understand these realities, but also be aware of the legal and policy constraints that accompany such endeavors.
The Application Process

All scientific investigations in Everglades National Park require the issuance of a Scientific Research and Collecting Permit. Permit applications are completed online and are processed through the office of the Everglades Permit Coordinator. Prospective investigators are encouraged to contact the permit coordinator for additional guidance in advance of submitting an application.

Permit applications undergo stringent review to ensure that proposals comply with applicable laws and policies. Any project that proposes any prohibited use in the MSD Wilderness also requires review by the park's Wilderness Committee. The Wilderness Committee meets with each applicant to review their proposal and evaluate the need and methodology for their project.

Prohibited uses are allowable only when they constitute a “minimum requirement” toward the preservation of either the wilderness character or some enduring value inherent in it. The process used to determine whether or not such activity should be permitted is called the Minimum Requirement Analysis. During the first phase of this two-step process, projects are screened to determine whether a non-wilderness site could meet project objectives, whether the project conflicts with long-term wilderness planning, and whether the project can be completed without involving non-prohibited uses.

Projects considered compatible with the long-term management of the wilderness then move to the second phase of the analysis where they are evaluated to determine the “minimum activity” necessary to meet the desired project objectives.

When contemplating research projects in designated wilderness, scientists are highly encouraged to develop and propose projects with substantial consideration for the preservation of wilderness values and character, and the avoidance of all identified prohibited uses.

The Marjory Stoneman Douglas Wilderness

More on Minimum Requirement Analysis

Any project that proposes the undertaking of any prohibited use in the MSD Wilderness must undergo a two-step, documented evaluation process called the Minimum Requirement Analysis, as outlined below.

1. DETERMINE IF PROJECT IS NECESSARY

The first step of the analysis questions whether or not the proposed project is necessary. The evaluation considers:

- Potential study site options outside wilderness
- Special provisions of wilderness legislation
- Requirements of other legislation
- Other guidance (agency policy, tribal agreements, etc.)
- Whether the project is necessary to preserve one or more of the qualities of wilderness character
- Whether the project supports one or more public purposes for wilderness (recreation, scenic, scientific, education, conservation, historical use).

If, at the conclusion of this first step, it is determined that the project is necessary, analysis continues to determine the minimum activity necessary to meet project objectives.

2. DETERMINE THE MINIMUM ACTIVITY

To best preserve the character of the area, researchers working in the MSD Wilderness are required to use only the minimum activity necessary. The term “minimum activity” signifies the least intrusive tool, equipment, device, force, regulation, or practice that will achieve the project objective. When determining the minimum activity necessary, the potential disruption of wilderness resources and character is given substantially more weight than economic efficiency and convenience. If a compromise of wilderness resources or character is unavoidable, only those actions that preserve wilderness values in the long run and/or have only localized, short-term adverse impacts will be permitted.

As part of the analysis, the project proponent will provide three or more alternative scenarios, including their preferred method for conducting research, a “minimum activity” alternative, and an alternative involving no prohibited uses.

During the application review, the Wilderness Committee will evaluate the alternatives to properly determine the need and appropriateness of the proposed project. The committee will determine and approve the minimum activities necessary to complete the investigation. This determination will be included in the research permit.

For more information on conducting research in the MSD Wilderness, please visit the park's wilderness page at:

www.nps.gov/ever/wilderness.htm