Policy Review
GPS-based Recreational Activities in National Park Areas

Updated October 1, 2009

A number of questions have been raised from within and outside the Service about recreational activities that use Global Positioning System (GPS) technology in park areas. These recreational activities include geocaching, virtual caching (including an educational variation called EarthCaching™), waymarking, and the Degree Confluence Project. Other variations and mutations on these themes currently exist, and more are likely in the future. The rapid growth of these GPS-based recreational activities (or GPSRA) in popularity and their potential to impact parks in both positive and negative ways has prompted this review, the purpose of which is to (1) provide some background information on these activities and (2) clarify how our existing policies and regulations should be applied when reviewing proposals to allow them. Since we expect this type of recreational use to continue to evolve, this review will be revised as necessary to keep it reasonably up to date and posted on-line at www.nps.gov/policy/GPSguidance.pdf.

Although this review refers to these activities collectively as "GPSRA," the review does not cover all recreational activities that employ GPS technology, such as wayfaring or GPS Frisbee golf, nor does it apply to nonrecreational activities that use GPS technology.

Contents

A. Background
B. Types of Recreational GPS Activities
C. Public Outreach and Education
D. Monitoring GPS Activities
E. Managing GPS Activities
F. Further Information
Appendix: Applicable Policies and Regulations

A. Background

Many people who participate in a GPSRA believe it has such a negligible impact that it does not warrant interference by park staff, or even informing park staff. However, judging from information contained in web sites promoting GPSRA and from information received from park staff, it is clear that these activities have the potential to cause injuries to participants or lead them into unsafe situations; cause serious adverse impacts to park resources (such as threatened and endangered species, cryptobiotic soils, and paleo and archeological resources); and otherwise violate NPS regulations. Conversely, other park staff have provided information showing how GPSRA can be properly managed to offer significant recreational and educational value to visitors, including opportunities for a growing number of families to experience appropriate outdoor adventures in parks.

As with all activities proposed for parks, we must ensure that a proposed GPS activity is appropriate to the park and does not impair or cause unacceptable impacts to park resources and values. Because of the diversity of GPSRA and the variations in the way they are (or can be) managed, the Service does not have a policy explicitly allowing or prohibiting any of these

activities. Instead, park managers must make determinations on a case-by-case basis, taking into account factors such as their park's resources and values, impacts that might be caused by the activity, the appropriateness of the activity to their park, and the ability of park staff to manage the activity. Several parks—such as Acadia National Park, Curecanti National Recreation Area, and Santa Monica Mountains National Recreation Area—have successfully created or authorized cache activities to augment their interpretation and education programs. Standard cautions about the potential hazards would apply to any use that is authorized in backcountry areas.

B. Types of Recreational GPS Activities

Geocaching usually involves placing in a remote area a physical cache containing a variety of objects in a weatherproof container. According to the geocaching.com web site, the basic idea is to have individuals and organizations set up caches all over the world and share the location coordinates of these caches on the internet. Hand held GPS devices can then be used to find the caches. Geocaching is viewed by some participants as a type of "treasure hunt" where they search for hidden caches using hand held GPS devices. The notion of a "treasure hunt" immediately sets off an alarm for NPS managers because it implies that the "hunters" will be placing caches in unapproved areas, digging up park resources and damaging the park environment. Obviously, much as we want park visitors to enjoy their experience, we cannot allow a GPS activity if it would lead to destructive behavior. Burying caches would generally violate 36 CFR 2.1(a), and could violate other regulations, as well. (It is important to note that the rules established for listing a geocache on the Geocache.com web site prohibit burying a cache or using pointed digging instruments to hide or to find a cache. In addition, permission from the NPS or other property owner must be obtained prior to listing.)

Virtual Caching also utilizes hand held GPS devices, but the goal of the activity is different, and the activity can be enjoyed without emplacement of a physical cache. Virtual caching provides GPS coordinates to existing points of interest, such as a geologic or cultural feature, wayside exhibit, or other object. It does not involve a physical cache. Instead, the participants answer a question or a riddle about the existing landmark or monument, or take a picture to let the cache "owner" know the participant was there. This type of activity generally directs participants to areas available to most visitors and can be designed to avoid unwanted off-trail hiking or development of social trails. For these and other reasons, this type of GPS activity is less likely to have unacceptable impacts and more likely to be appropriate to a park. The web site at www.earthcache.org lists a number of virtual caches that have been approved by various parks. To ensure appropriate educational content, EarthCaches™ are judged for suitability by the EarthCache™ team, which is part of the Geological Society of America.

Letterboxing involves the placement of a cache containing a stamp and an inkpad that enables participants to document that they found the specific location. Participants find the location by following "clues." Clues often involve map coordinates or compass bearings, but most letterboxes currently in existence do not require the use of a GPS device. Although letterboxing is intended to be environmentally friendly, if the "box" is buried or concealed by manipulated vegetation or rocks, or will cause participants to create social trails or traverse sensitive or dangerous locations, the impacts will likely be unacceptable. However, it is entirely possible that some parks, particularly those with a vast expanse of backcountry, will have locations where a letterbox could be concealed and sought out without causing unacceptable impacts. In those cases, the superintendent has the option to designate locations where, or establish conditions

under which, the cache could be left unattended—for example, in the same location as an NPS-sponsored summit log.

C. Public Outreach and Education

One of our biggest challenges is communicating NPS policies and regulations to the recreational GPS user community. Superintendents should be familiar with the Director's commitment to civic engagement and public involvement articulated in Director's Order #75A, and with the specific public notice requirements contained in 36 CFR 1.7.

Generally, discussion and communication about regulations and policies should be used as an opportunity to educate GPS user groups about the national park system and for NPS staff to become educated about the views held by the user groups. It is in our interest to establish ongoing and personal communication with the GPS user community, as we have with other park visitors. To this end, several NPS staff have met with GPS user representatives to foster better understanding about issues, trends and concerns on both sides. Since most of the contact between those who plan GPS activities and those who participate in them takes place over the Internet, we must engage through that medium, as well.

More often than not, candid discussion can produce positive results for everyone. For example, the Washington Office, with the assistance of several field areas, contacted the web site manager for www.geocaching.com. Following this consultation the web site manager agreed to fully cooperate by inserting language explaining the NPS mission and goals. NPS staff should work with web site managers to remove, or refrain from posting, any caches in national park areas that have not been approved by the NPS. However, if a posting that has not been previously approved by the park seems to have potential as an appropriate recreational or educational activity, park staff may advise the cache developer on steps to be taken to gain the park's support for the activity.

D. Monitoring GPS Activities

Park managers should monitor park sponsored and approved GPS activities in the same way they would any other recreational or educational activity in the park. This is necessary to ensure that park objectives are being met and that unanticipated and unacceptable impacts do not occur. In addition, field staff should be vigilant and alert to caches that have been posted on the web without prior knowledge or approval by park staff. The points of contact for removal of a cache are the cache developer and the web site host. The sequence of follow-up actions may consist of the following:

1) Confirm that the cache has not already been approved by the park through another division or a park representative.
2) If the park determines that its placement or content is appropriate and consistent with the park's mission, work with the cache developer on fine-tuning the cache.
3) If the cache is inappropriate, contact the cache developer through the web site to get them to remove the cache, or
4) Remove the cache and contact the developer through the hosting web site.
5) Contact the web host to get the cache removed from the web site.
6) Continue to follow up with the web site host until the cache has been removed.

E. Managing GPS Activities

Ideally, GPSRA should be considered in the context of a comprehensive planning process. However, if a superintendent determines it is necessary to prohibit GPS activities in some or all parts of the park due to the sensitivity of park resources or other reasons, this may be done through the superintendent's compendium, following procedures in 36 CFR sections 1.5 and 1.7. (In some cases, a special regulation may be necessary, in accordance with 36 CFR 1.5(b).) Conversely, if a superintendent determines that a GPS activity can take place without causing unacceptable impacts, then the superintendent has the authority to manage the activity. If necessary, the superintendent can use the 36 CFR 1.5 authority to designate specific locations, times, and conditions for the activity. Park managers who wish to allow GPS activities will be most likely to find virtual caching an appropriate form of enjoyment. Selection of locations and communication with the GPS community is the key to success.

Conditions may exist where a properly managed GPS activity would be complementary to the park's education mission, so that the superintendent might wish to be a sponsor or co-sponsor. Where appropriate, and preferably with the collaboration and assistance of the recreational GPS user community, this activity could be offered by a park to highlight or emphasize particular resources or destinations and thereby enhance the visitor's experience, much like orienteering courses where visitors learn land navigation. (Superintendents may also wish to consider a "Cache In Trash Out" type of activity with members of the geocaching community.)

A superintendent may find that a GPS activity is an appropriate use but needs to be managed under the terms and conditions of a permit. Requiring a permit can sometimes help to manage the use and also raise awareness in a way that fosters the cooperation of recreational GPS users. For guidance on permit procedures, refer to Director's Order #53: Special Park Uses, and its companion reference manual. Superintendents are reminded that cost recovery regulations may apply to permits issued for GPS activities.

Superintendents who contemplate allowing or encouraging GPS activities—whether sponsored by the park or by others—should consult the DO-12 Handbook and assess the impact on park resources and values and on other visitor uses. This information should be helpful in making a determination specific to their park. Detailed considerations and criteria are addressed in sections 8.1 and 8.2 of *Management Policies 2006*. It is important that an interdisciplinary approach be taken. If unacceptable adverse impacts cannot be avoided or mitigated to the point where the impacts are acceptable, the activity must be disallowed. Whenever the activity is allowed it must be carefully controlled and monitored. (See also "Applicable Policies and Regulations" at the end of this review.)

Regional directors may issue additional guidance on managing GPS activities within the parks in their regions.

F. Further Information

Contacts. Evaluating new activities and requests to conduct them on park lands can be very complex. If you have questions or need assistance, please contact one of the following people:

- Law enforcement: Lane Baker, Division of Law Enforcement, Security and Emergency Services, lane_baker@nps.gov, 202-513-7128.
- Permitting: Lee Dickinson, Special Park Uses Coordinator, lee_dickinson@nps.gov, 202-513-7092.
- Policy questions: Marcia Keener, Program Analyst, Office of Policy, marcia_keener@nps.gov, 202-208-4298.
- Technical questions: Tim Smith, NPS GPS Program Coordinator, GISD, tim_smith@nps.gov, 303-969-2086

On-line Forum. If there is sufficient interest, an on-line forum will be set up to exchange information and constructive ideas. When it becomes available, it will be accessible through the "GPS-based recreational activities" topic in the scroll-down menu on www.nps.gov/policy.

Informative Web Sites

- **Guidelines for listing on Geocaching.com** (www.geocaching.com/about/guidelines.aspx)
- **EarthCache™ Sites** (www.earthcache.org/)
- **Letterboxing** (www.letterboxing.org)
- **Waymarking** (www.waymarking.com
- **Waymarked NPS sites** (www.waymarking.com/cat/details.aspx?f=1&guid=57c9b918-8203-4210-bdbd-8ba85c3953fe)
- **The Degree Confluence Project** (www.confluence.org)
- **Curecanti NRA lesson plan using GPS** (www.nps.gov/cure/forteachers/lp_globes.htm)
- **Acadia NP EarthCache web page** (www.nps.gov/acad/earthcache.htm)
- **Santa Monica Mountains NRA parkwide Earthcaching program** (www.nps.gov/samo/planyourvisit/gpsactivities.htm)
- **Wilderness.net toolbox on GPS activities in wilderness areas** (www.wilderness.net/index.cfm?fuse=toolboxes&sec=geocaching)
- **Management Policies and Director's Order 53: Special Park Uses** (www.nps.gov/policy)
- **"GPS-based recreational activities" topic on scroll-down menu at** www.nps.gov/policy

---

Appendix: Applicable Policies and Regulations

Policies. All provisions of NPS *Management Policies 2006* are applicable to GPS activities. The excerpts noted below are especially salient:

> *(From section 8.2, Visitor Use)* The Service is committed to providing appropriate, high-quality opportunities for visitors to enjoy the parks, and the Service will maintain within the parks an atmosphere that is open, inviting, and accessible to every segment of American society.
>
> *(From section 8.1.2, Process for Determining Appropriate Uses)* Superintendents must continually monitor and examine all park uses to ensure that unanticipated and unacceptable impacts do not occur. Superintendents should also be attentive to existing and emerging technologies that might further reduce or eliminate impacts from existing uses allowed in parks. Unless otherwise mandated by statute, only uses that meet the

criteria listed in section 8.2 may be allowed.

(From section 8.2.2, Recreational Activities) The National Park Service will manage recreational activities according to the criteria listed in sections 8.1 and 8.2 (and 6.4 in wilderness areas). Examples of the broad range of recreational activities that take place in parks include, but are not limited to, boating, camping, bicycling, fishing, hiking, horseback riding and packing, outdoor sports, picnicking, scuba diving, cross-country skiing, caving, mountain and rock climbing, earth caching, and swimming. Many of these activities support the federal policy of promoting the health and personal fitness of the general public, as set forth in Executive Order 13266. However, not all of these activities will be appropriate or allowable in all parks; that determination must be made on the basis of park-specific planning.

(From section 8.2.2, Recreational Activities) The Service will monitor new or changing patterns of use or trends in recreational activities and assess their potential impacts on park resources. A new form of recreational activity will not be allowed within a park until a superintendent has made a determination that it will be appropriate and not cause unacceptable impacts. Restrictions placed on recreational uses that have been found to be appropriate will be limited to the minimum necessary to protect park resources and values and promote visitor safety and enjoyment.

(From section 8.2.2.1, Management of Recreational Use) The Service will seek consistency in recreation management policies and procedures on both a Service-wide and interagency basis to the extent practicable. However, because of differences in the enabling legislation and resources of individual parks, and differences in the missions of the Service and other federal agencies, an activity that is entirely appropriate when conducted in one location may be inappropriate when conducted in another. The Service will consider a park's purposes and the effects on park resources and visitors when determining the appropriateness of a specific recreational activity

The excerpts shown above are especially salient, but it is important that decision-makers be familiar with other provisions of sections 8.1 and 8.2, and with cross-referenced policies aimed at protecting natural and cultural resources and wilderness resources. Also, section 8.6 on managing special park uses should be consulted when the activity will be planned and organized independently by an individual, group, or organization, rather than by park staff, and thus may require a permit. (See 36 CFR, 1.6.) The Director's expectations for civic engagement and public involvement are contained in Director's Order #75A.

While the policies listed above apply to wilderness as well as non-wilderness, the following excerpt from *Management Policies 2006* specific to wilderness should also be noted:

(From section 6.4.3.1, Recreation Use Evaluation) Recreational uses—particularly new and emerging activities that compromise the stated purposes and definitions of wilderness or unduly impact the wilderness resource or the visitor experience within wilderness—will be evaluated to determine if these uses are appropriate or should be limited or disallowed through use of the superintendent's compendium in 36 CFR 1.5. Evaluation or reevaluation should be accomplished within wilderness management plans or similar implementation

plans. Recreational uses that do not meet the purposes and definitions of wilderness should be prohibited in NPS wilderness.

Significant changes in patterns or increased levels of use will not be authorized by special permit, administrative discretion, or authorities under the superintendents' compendia, except in cases where sufficient information exists to adequately determine there is no significant impact on wilderness resources and values, including visitor experiences. These increased levels of use and changes in patterns of existing use will normally not qualify for a categorical exclusion under the National Environmental Policy Act. Decisions regarding significant changes in patterns and new levels of use will require environmental analysis and review, including opportunity for public comment, in accordance with the NEPA requirements.

A link to the Wilderness.net "toolbox" on GPS activities in the National Wilderness Preservation System is provided under "Informative Web Sites," above.

Regulations. In addition to NPS *Management Policies 2006*, there are several policies codified as regulations that are especially applicable:

- 36 CFR 1.5, 1.6, and 1.7, establish procedures for allowing or prohibiting certain activities, issuing permits, and informing the public.
- 36 CFR 2.1, regarding the preservation of natural, cultural and archeological resources, prohibits digging, destroying, or injuring park resources. This would apply to digging holes to bury caches, manipulating vegetation to conceal caches, creation of unauthorized trails, and other damaging behavior incidental to GPS activities.
- 36 CFR 2.22 prohibits abandoning property, which includes leaving property unattended for longer than 24 hours. This regulation also authorizes superintendents to designate locations where, or conditions under which, longer time periods may apply.
- 36 CFR 2.31 prohibits trespassing, tampering and vandalism, which might occur as participants search for caches.

-----End of Policy Review-----