GEOCACHING HIKE AND SEEK WITH YOUR GPS

Geocaching: Hike and Seek with Your GPS

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Starting Off

"The beginning is the most important part of the work."—Plato

As the numbers drop, I move faster. Dried twigs snap, leaves rustle. I'm on the hunt this late autumn morn. The display on my GPS receiver shows 517 . . . 453 . . . 326. Although I've been hiking for several miles, my body urges me to run, but I must resist, keeping my senses alert to avoid missing the quarry. The count drops, drops—well under 200 feet—then suddenly starts to climb. I freeze and look behind me. I see a small opening in the trees and brush. Entering, I follow a minor trail into a clearing, once the foundation of a cabin with a spectacular lake view. Just inside the ring of stone, two large pieces of birch bark nestled below one of the rocks look suspicious. I move them and find it: a geocache. A plastic container placed in a hollow contains knick-knacks. Opening it, I place a plastic pen and take a pin—my trophy. The container goes back into its corner and the bark into place.

This is the new activity of geocaching: part treasure hunt, part outdoor exploration. It owes its birth in 2000 to human ingenuity, the Internet, and Global Positioning System (GPS) technology. The concept is simple. One person puts together a collection of things—toys, mementos, trinkets—and places them in a container, called the *cache*, takes a reading of its position with a GPS device, then posts the location numbers on a Web site. Someone else looks up the location, finds the cache, takes one item from the collection, and replaces it with another.

It sounds easy; you can choose to take a short walk down a well-manicured trail in a park to a cache that you discover after a few minutes of looking. Or you can select a hunt that involves hiking into mountains or remote wilderness and searching for an hour—or far longer—to find the container. You can find caches tucked away in urban nooks and crannies, or on cliff faces that require the seeker to rappel down to reach the hiding place. Geocaching can be as domestic as the wooded area just a five-minute walk from your home, or as exotic as scuba diving 100 feet down off the coast of Bimini to find the final

clue to a cache. You can hunt for dime-store knickknacks and toys from fastfood restaurants, or participate in contests for thousands of dollars, or just find caches for the bragging rights. Go for solo jaunts, or take along others. Enjoy the health benefits of physical activity, the pleasure of play, the aesthetic delight in the natural world, and the challenge of a puzzle, all at the same time.

The experience is as varied as the possibilities, and can lead to moments stolen out of time. A few miles from where I live, on a street I sometimes take as a shortcut, a single guiet road heads off to the side. Over the years, I had never wondered what lay down there. In fact, its existence barely registered with me. Early in my geocaching experience, one nearby cache had me circling a large undeveloped area. Finally sitting down with an online map, I noticed this road and how it seemed to extend toward the cache location. Taking that turn for the first time, I found myself pulling into a dead end where a plaque for a memorial forest stood. It was overcast, a little drizzly, and wet from previous rain. I marched in, following the readings on my GPS unit, kept to a trail, past an insignificant offshoot, and ever closer to the final spot. It seemed to be off the trail on the border of a marsh. Slowly I dodged and weaved past bramble, which grows faster than rumors where I live. Five feet, ten feet, twenty: progress was slow, and I had yet to learn the lesson that when a shortcut seems advisable, the searcher is usually delusional. A foot in the damp muck finally convinced me, and I looked around, then noticed that just beyond bramble thick enough to audition for a production of Sleeping Beauty there seemed to be another trail: that blasted offshoot that I had ignored.

Being no prince, and seeing no thorn magically turn away, I moved back, regained the main trail, and then took that branch. I wove past walls of grass and bush until the path moved onto a land spit gesturing out into the marsh. In the distance was a major road I had taken thousands of times. I had seen this marsh from the other side, without realizing that it was possible to move this easily into it. The GPS readings suggested that the hiding place was a little depression to the left, with the cache probably behind a tree. Then I heard a loud fluttering; off to the right were two wild ducks beating their wings, lifting themselves off from the wetlands and taking to the air. Then there was a deep rasping, and a large dark bird with a neck like a swan's glided in for a rest. It was a great blue heron, a bird I have never seen live. Sure, I found the cache hidden behind a small clump of trees, but the experience was the real magic.

Why Do It?

Sentimental thoughts of drifting magic pixie dust aside, geocaching is a wonderful way to spend time apart from the demands of work and life. There are many reasons to take up the activity.

Health

Although you can pursue geocaching in different ways, I haven't heard of caches hidden at drive-up windows. By its nature, geocaching requires that you be out and on your feet and moving around. If you become even moderately involved, you could easily find yourself walking miles each week that you would never have done had it been planned "exercise." Depending on your athletic prowess and the vigor with which you pursue the quarry, you can leave yourself in a heavy sweat and burn hundreds of calories in a single hunt. And if you are the type who hates exercise for its own sake, hunting some caches can get you moving about, even against your better judgment.

Family Togetherness

A good number of geocachers involve their families, from youngest to oldest. On the very first search I undertook, I brought my wife, our two children, plus four siblings who were staying with us that weekend. Even though it was cold and damp, the kids absolutely loved the whole process. We gave each a little something to trade and went to some nearby trails to find a cache hidden a good half mile in. The boy who actually spotted the container in a dead tree trunk got first choice of the loot, and the others lined up to see what they might get. The parents of the visiting horde said that their children were talking about the experience for a week after.

Education

Hand in glove with family is education. Despite even the most recalcitrant nineyear-old's worst of intentions, it is impossible to participate in geocaching without learning something. To navigate, you can use a compass in addition to the GPS unit, and that means math. Maps mean geography. Global positioning is science. Discovering a cache requires patience and logic. Many caches are in sites with historic significance. Working with others requires teamwork. And hiking through forests, mountains, and wildlife preserves provides opportunities to learn about natural science and ecology. Even an adult might learn something.

Natural Beauty

It is painfully easy to forget to smell the roses—or see the pine trees or hear a noisy brook—when dealing with daily life. Cell phones, television, the Internet, video games, and the remaining roster of consumer electronics can keep your head spinning. But geocaching is an activity that, ironically, uses technology to direct you toward the natural world. From the austere majesty of mountains and deserts to the contemplative consideration of trees in a park, you can find a sense of psychic renewal.

Challenge

The Rolling Stones said "you can't always get what you want," but that is actually much of the fun in life. If everything were easy, nothing would matter. In geocaching, you can choose whatever level of challenge you'd like on a given day. Caches are listed with rankings for terrain and difficulty. Choose a cache that should be easy to find but that requires a good, long hike. Chase after one that could have you scratching your head for an hour when you arrive at the final coordinates. Undertake cache hunts that require kayaking, or rock climbing, or scuba diving, or mountaineering, or puzzle solving.

Discovery

You might be amazed at the things you pass in your everyday life. There are so many enclaves of nature, so much history, so much that is just plain curious. Geocaching will take your hand and lead you to one spot after another, all hidden in the open, that you'd never otherwise have known existed. Almost every time I go, I find another delightful surprise.

Fun

It's a good time. Exercise your wanderlust, meet others for geocaching events, enjoy choosing your trophy from the cache, and have a good excuse for a beer at the end of the day.

Who Geocaches?

Geocaching is for everyone. All right, maybe not everyone, but for a surprising variety. One is a septuagenarian grandmother. Another, when she isn't attending high school, goes geocaching with her friends. A semiretired couple living a few miles from me geocaches. Geocachers are all over the world: in England and New England and New Guinea, in Finland and Florida. They live across the continent and across the street. Programmers are involved, and so are secretaries and celebrities.

Whether you think of geocaching as a sport with strenuous hikes through mountains and technical rock climbing, or as a game about finding tiny treasures, it has its appeal—so much so that the activity has grown from a few dozen enthusiasts at its onset to hundreds of thousands just two years later. And, as more companies realize just how much people enjoy geocaching, its growth may really take off.

One reason for the expanding interest is the small price required to begin participating. The only required equipment is a handheld GPS receiver, and

models start at under \$100. The government covered the biggest expense through tax money—we all chipped in about \$40 each, all 200-odd million of us. What do you get for the money? Something very expnsive.

GPS History

Geocaching is possible only because the U.S. Department of Defense developed the Global Positioning System as a navigation aid for the armed forces at a cost of about \$12 billion since the 1970s, and that cost is likely to double over the next decade or two.

The reason for the big numbers is the equipment necessary to make GPS work: dozens of satellites in continuous orbit around the globe. Special receivers with access to the open sky detect the signals and, using some sophisticated and clever mathematics and electronics theory, determine the operator's position, direction, and speed anywhere on earth.

At first, the GPS technology was a military secret. A civilian version was available, but it was severely restricted though a program called Selective Availability (SA). Users without proper security clearance could find positions only within roughly 300 feet (100 meters) of their actual locations. However, in May 2000 President Clinton signed an executive order directing the military to stop scrambling GPS signals.

It was suddenly possible for anyone to buy a GPS receiver and get the full benefit of the system. Instead of finding position within the length of an American football field, users could determine a location to within a tenth of that distance, or better. No small coincidence that people had developed the idea of geocaching within a couple of weeks of the change.

History of Geocaching

The term has been used only since 2000, and the game or sport itself is barely older. Originally called GPS Stash Hunt, it was the brainchild of David J. Ulmer, who created the first cache—containing a can of beans, a compass, and a videotape—in Oregon. Interest in the new activity quickly grew, but Ulmer officially dropped out of the game roughly a month after its creation out of concern for potential environmental damage of too many feet tromping over too many unspoiled parts of the planet, so he explains. (Later chapters discuss in depth how proper geocaching can not only prevent damage, but also can result in even cleaner areas and minimize unnecessary wandering about.)

The split between Ulmer and the rest of the players resulted in a fair degree of unpleasantness on both sides that turned into arguments and even name-calling on Internet discussion boards. In fact, the brief description of the game's history on Geocaching.com, the largest Internet site serving as the

clearinghouse for announcing and following action at caches, fails to mention Ulmer by name. One name that does appear is Mike Teague, who built the first Web site for the game and found that first cache.

While he was still involved, Ulmer had second thoughts about the name of the game. Although GPS seemed a natural, stash had many negative connotations with drugs and illegal activities, and most everyone involved looked forward to the game becoming popular with the general public. "Doesn't seem to fit in today's spandex, natural, ecotourist world we now live in," he wrote at the time. A number of people began making suggestions, some of which, like geosatplaneteering, were unwieldy and would only have caused nightmares for unsuspecting marketers. Ulmer came close with the term geostashing, with the final variation suggested by another player, Matt Stum, who wanted to substitute the word *cache* for *stash*. According to him, *cache* had been a name for any collection of food and supplies left by northern explorers. People who traveled a given trail would know about the caches, which were community property. If people needed something, they'd take it, and similarly leave their surplus. In addition, cache was a type of computer memory. The dual reference, historic and modern, got the popular nod after an online poll, and the game *geocaching* was born.

Predecessors

Geocaching is both a noun and verb that describes the game and the action of playing it. But the concept of hiding things and seeking them is older than the onset of the twenty-first century. According to Geocaching.com, since the 1980s a group of Finns in Helsinki have played a variation on orienteering in which they hunt locations with compass and map. The members introduced GPS systems in the 1990s to check accuracy, so they could be the original geocachers.

Even at that, games requiring searching are ancient. The children's game of hide-and-seek can be traced back more than 4,000 years. A number of magician's basic entertainments, such as tricks where cards go missing only to reappear later, or balls seeming to hop from one overturned cup to another, are based on this same principle. The two activities that seem most like parents, though, are the letterboxing game and orienteering.

In 1854, James Perrot was a guide in Dartmoor, a region of moors and wooded valleys that is now a national park in southwest England. In one area called Cranmere Pool, a relatively inaccessible point in the high moors, Perrot left copies of his Victorian calling card in a glass bottle for people to find, proving that they had reached the point. Each visitor would also leave a selfaddressed postcard. The next visitor would retrieve the card and send it upon returning home. The practice expanded slowly over the next few decades to five letterboxes.

This developed into a pastime using rubber stamps. A participant has a personal stamp and logbook. Each letterbox also has its own stamp and book. People who find a letterbox use their stamp on the log at the box and then mark their own log with the box's stamp. Because some people still place postcards in the letterboxes, participants do drop the cards in the mail. To find a box, those playing the game share with each other clues that include a reference to a map grid, compass bearings from a landmark, and a specified number of paces. Books and Internet sites list many of these letterbox clues. Millions of people enjoy letterboxing; there are tens of thousands of registered letterboxes, and many more that are not.

Orienteering, the other parent activity, officially started in 1897. Using compass and map, participants race over a course that can be wilderness forest, park, or desert. Each person must proceed along a series of designated points, punching cards at each location in turn. Whoever has the fastest time wins, but many people, from young children to nonagenarians, play for recreation, and single orienteering meets have been known to attract tens of thousands. Not only is orienteering played on foot, but also on mountain bikes and cross-country skis.

Exploding Popularity

Still, the child might outreach the parent, and geocaching could become more popular than either predecessor over time. It has been one of those examples of viral marketing, a modern term for word-of-mouth as happens only on the Internet. At last count (this number jumps faster than I can look it up), more than 88,000 active caches in 188 countries were listed on Geocaching.com, only one of several similar sites. Companies are beginning to notice the geocaching market, and at least one firm is developing corporate team-building events based on geocaching. Welcome to a booming trend.

Although it is easy to become involved, you do need to learn some skills: use of GPS devices, navigation with compass and map, hiking preparation, integrating other technology, and geocaching etiquette, among others. You will learn these skills and more in this book. The best place to start is at the heart of the game.