Engaging the public in geoscience can be a challenge. What is even more of a challenge is having them experience geology in the field with nothing more than a few pages of notes. Yet EarthCaching has them doing exactly that at more than 20,500 sites around the globe.

We want to add more sites and we can do that best with your help.

EarthCache™, a program developed and coordinated by The Geological Society of America (GSA), is part of the highly successful worldwide treasure-hunt phenomenon known as geocaching. The game is based around the use of a GPS receiver to find a location where other people have hidden a container. Participants will find a log book and many small treasures inside the container—they sign the log book, trade trinkets, then put the container back in the same place. Afterward, they log the experience online.

In EarthCaching, however, there is no container—Earth itself provides the treasure. Visitors to EarthCaches are asked to undertake an educational geology–based task to both expand their own knowledge and to prove that they visited the site. They then log their visit on the geocaching website.

EarthCaching started in 2003 when a GSA member mentioned during the annual meeting that GSA should somehow get involved in geocaching. Within a few months, GSA partnered with the geocaching company Groundspeak, Inc., and the National Park Service established a set of guidelines for the creation of EarthCaches, setting up three trial sites. From these three, one in Australia and two in Colorado, and with the help of many hundreds of individual cachers, there are now well over 20,500 EarthCache sites in more than 167 countries. These sites have been visited by more than 6.3 million people, and the number is rising exponentially.

EarthCaches can be developed by anyone in the community through the geocaching website www.geocaching.com using a set of guidelines found at community.geosociety.org/earthcache/home. The ideal sites are ones that laypeople can visit to learn about some interesting geological phenomenon not only by observing it but also by undertaking a task that gets them more involved in the science. For example, people might be taken to a road cut that shows a dramatic normal fault. The geocacher could be asked to work out the fault displacement by observing a distinctive layer that is offset. Another example might be to ask a visitor at a fossil location to measure the size of the fossils and work out an average size.

How can you help?

We are looking for GSA members who would like to get involved by developing EarthCache sites for the general public and in other EarthCache-related projects. To get started, just complete the simple online form at http://bit.ly/1PnwSx1 and we’ll email our booklet “EarthCaching—A Guide for GSA Members” to you. It outlines how to help us make this program grow.

GSA will host the 5th International EarthCache Event (5IEE) on Saturday, 24 Sept. 2016, at the Colorado Convention Center in Denver, Colorado, USA. This event is just before the GSA Annual Meeting, so we invite you to come and learn even more about EarthCache.