

## Creating a 4-H Geocache

*What is a cache?* Pronounced "cash" - In geocaching it is a hidden container filled with a log book and pencil/pen, and possibly prizes.

First you must register online at [www.geocaching.com](http://www.geocaching.com). This is free and gives you access to other cache coordinates. It is recommended that you find a few caches before you place your own in order to get a feel for the game. The location of a cache is the most important element of hiding a cache. The location you choose is more than just a place. You need to consider the following questions: Why you want to bring people here? What is it you are hoping they get from the location alone?

Make a list of potential areas to put the cache. Research the area you decide to put the cache. It is important to get permission (if necessary) to place it and to consider the effects on the environment it may have when people search for it. Make sure it is not visible to a passerby.

The first item you need is a water resistant container that will have a tight seal. Plastic buckets, Rubbermaid/Tupperware containers, and ammo boxes have been successful in the past. The location determines the size of container needed. To protect the items in case of a leak, it is recommended to put them in zip lock bags.

Mark the container on the outside with geocaching logos so those who accidentally find it know what it is. Also, make sure there is a 4-H clover on it, so it is recognizable as a 4-H cache. A spiral notebook and writing utensil (pen and/or pencil) are also needed to create a logbook for the cache. There is a welcome (stash) note available that should be included that contains information about geocaching.

The last thing to add is the treasures! Since these are 4-H caches, 4-H items such as pencils, pens, t-shirts, notepads, etc are good items to start with. Food items are a bad idea as animals will tear the container apart. Also, this is a family friendly game, so no alcohol, tobacco, firearms, knives, drugs, and other inappropriate things should ever be put in a cache.

The next step is to place your cache and get an accurate reading of the coordinates. The map datum on the GPS needs to be set to WGS84. The datum can be checked by going to Main Menu-Setup-Units-Map Datum. To get coordinates, take five or more readings of the location and average them. Before taking each reading, you should walk away (at least as far as your accuracy range) and then back to the location. Depending on the coordinate system used, to average the coordinates, add the last few digits and divide by the number of readings. Make sure the averaged numbers look reasonable compared to your readings. Once the coordinates are determined, write them on the container, in the logbook, and keep a copy for your records. Once home, report the cache online by filling out the form provided by geocaching.com. This form has a drop down menu to select what coordinate system you used. It is recommended to use the HDDD MM.MMM format.

The last step is to maintain the cache. Check on the container and its contents regularly (at least once a month). Make sure it has not been moved and is still in good shape. Determine if the location is harming the environment and if so, move it to a new location. Most importantly, have fun and enjoy the experience.

### **For more information:**

<http://www.geocacher-u.com/resources/index.html> Brochure about geocaching

<http://www.geocaching.com/about/hiding.aspx> Contains information about hiding your cache

<http://www.geocacher-u.com/> Contains information about geocaching and downloads for cache

<http://4h.unl.edu/kids/gpsgeocaching.htm> Information about Nebraska 4-H Geocaches

## Checklist for Cache

- Register at [www.geocaching.com](http://www.geocaching.com)
- Choose a hiding location
- Determine the appropriate size container for location
- Find a water resistant container
- Mark the outside of the container with geocaching logos and 4-H clover
  - Link to 4-H clover - <http://oklahoma4h.okstate.edu/resources/clipart/emblem.htm>
  - Link to geocaching logo - <http://www.geocaching.com/about/logousage.aspx>
- Create a logbook for the cache
- Get a pencil(s) to put in the cache (Pens will work except in cold weather)
- Gather treasures to put in the cache
- Inside the cache box, put a stash note along with your contact information
  - Link to stash note – <http://www.geocacher-u.com/resources/stashnote-halfsize.pdf> (small)  
<http://www.geocacher-u.com/resources/stashnote-50cal.pdf> (large)
- Put all the items going in the cache container inside zip-lock bags (logbook and writing utensil(s) in one, treasures in others)
- Go to the cache hiding location and place the cache. Make sure map datum is set to WGS84.
- Take five or more reading of the coordinates (take a reading, walk away, take another reading, etc.)
- Average the coordinate readings to determine the final coordinates
- Fill out the online form to report the cache
- After the cache is posted online, check on it regularly (condition of container, location, environment impact, etc) and check the cache page to see what people have to say about your cache
- HAVE FUN!!!
- Link to caching abbreviations: <http://www.geocaching.com/about/glossary.aspx>