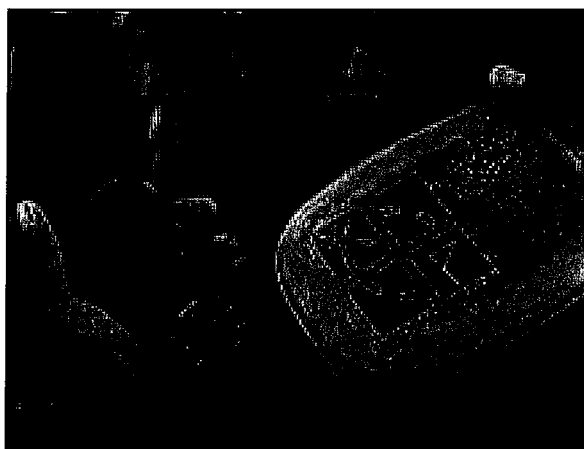


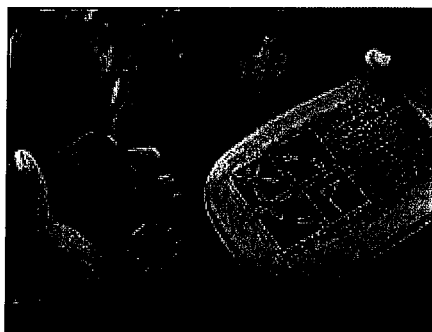
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# Geocaching

GIS/GPS



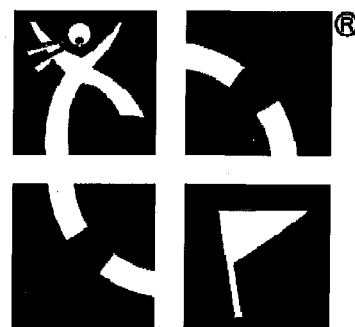
It is the policy of the University of California (UC) and the UC Division of Agriculture & Natural Resources not to engage in discrimination against or harassment of any person in any of its programs or activities (Complete nondiscrimination policy statement can be found at <http://ucanr.edu/sites/anrstaff/files/169224.pdf>). Inquiries regarding ANR's nondiscrimination policies may be directed to Linda Marie Manton, Affirmative Action Contact, University of California, Davis, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1318.



***This We Believe:***

- The boy and girl are more important than the projects.
- The member should be their own best product.
- No award is worth sacrificing the reputation of a member or leader.
- Competition is a natural human trait and should be recognized as such. It should be given no more emphasis than other fundamentals.
- Learning how to do the project is more important than the project itself.
- Many things are caught rather than taught.
- A blue ribbon member with a red ribbon project is more desirable than a red ribbon member with a blue ribbon project.
- To learn by doing is fundamental in any sound educational program.
- Generally speaking, there is more than one good way of doing most things.
- Every member needs to be noticed, to feel important, to win, and to be praised.
- Our job is to teach members *how* to think, not what to think.

# Geocaching



## The 4-H Way

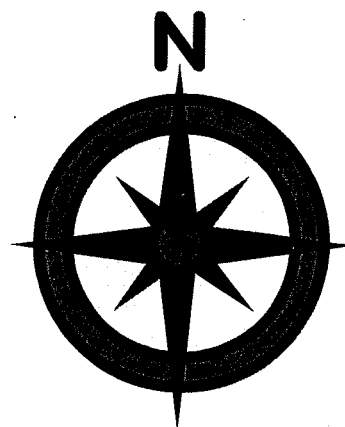
*A Basic Guide to Geocaching*

*As it relates to the 4-H Mission Mandates*

Compiled by:

Kathleen Bohde and Kendall Martin

Purdue University Extension



# **Note from the Authors**

It is our hope that "Geocaching the 4-H Way" will introduce the joys of geocaching to all who utilize it. It is intended to be used as a basic introduction and foundation for a multitude of geocaching uses.

"Geocaching the 4-H Way" is compiled in such a way that it can be used as:

A resource guide for planning 4-H group geocaching adventures

A fun way to incorporate science into 4-H Club activities or educational workshops

A guide for 4-H Club Volunteer Leaders to plan an exciting 4-H Club outing

A project manual for those who choose to make it a 4-H project

A resource for forming a 4-H Geocaching Special Interest Club (4-H SPIN Club)

A great way for families to enjoy a 4-H activity together

Classroom school enrichment and/or after school activities

Many other 4-H Club and group activities

# **PURDUE EXTENSION**

***Making a Difference***



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## **Acknowledgements**

Adapted from National 4-H Council, Groundspeak Geocaching and Virginia Tech 4-HGeocoin Adventure.  
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Website: [www.geocaching.com](http://www.geocaching.com)



# 4-H Mission Mandates



## Science

4-H Science programs reach more than 5 million youth with hands-on learning experiences to encourage young minds and help fill our nation's shortage of young leaders proficient in science, engineering, and technology. Our science programs tackle important national and global issues such as climate change, workforce development, and technological innovation.

To address increased demand for science and technology professionals, 4-H is working to reach a bold goal of engaging one million new young people in science programs by 2013. Currently, 4-H Science programs reach more than 5 million youth with hands-on learning experiences to ensure global competitiveness and prepare the next generation of science, engineering, and technology leaders.

4-H's approach is comprehensive and holistic—from agriculture to climate change to alternative energy—youth are learning about highly relevant complex systems and issues that will ensure their contributions to their communities today and their success as global leaders tomorrow.



## Citizenship

4-H has always emphasized the importance of developing passionate, well-informed citizens who are involved in their communities and help to foster positive social change. Civic engagement helps young people understand the big picture and learn skills that will encourage them to become engaged, responsible citizens and successful leaders. With 4-H citizenship programs, youth learn how to lead, make decisions, and contribute to their communities from an early age.

4-H Citizenship programs empower young people to be well-informed citizens who are actively engaged in their communities and the world. By providing them with opportunities to connect to their communities and adult leaders, youth gain a clear understanding of their role in civic affairs and are able to build their decision-making ability. This solid foundation helps youth understand and acquire the skills that will allow them to become astute leaders for the 21st Century.

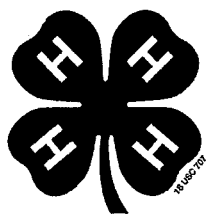


## Healthy Living

Healthy living is just plain smart. That's why it's been a core belief of 4-H since the beginning. By supporting the physical, mental, and emotional health of our nation's youth, we help them lead healthy and productive lives into adulthood. Programs address such critical issues as childhood obesity, substance abuse, and physical safety.

Healthy living has been at the core of 4-H and remains a foundation of our pledge. Although 4-H believes that healthy living habits of young people begin in the context of their families and communities, we strive to equip youth with healthy living knowledge and skills that will prepare them physically, emotionally and socially to meet the challenges of the 21st century.

To meet the needs of today's youth, 4-H Healthy Living programs seek to address national issues including nutrition and physical fitness, substance abuse, safety, and social and emotional wellness.



# Geocaching and the 4-H Mission Mandates

Geocaching is a real-world, outdoor treasure hunting game.

Players try to locate hidden containers, called geocaches, using GPS-enabled devices and then share experiences online. This activity incorporates all of the 4-H Mission Mandates and reminds us of the 4-H Pledge.

## **Science:** *"I Pledge My Head to Clearer Thinking..."*

**Life Skills:** critical thinking, problem solving, decision making, connecting with the environment, utilizing GPS technology, learning orienteering, participating in a high-tech, outdoor adventures and journaling online

Cachers solve clues and locate GPS coordinates to find the "treasure". In its simplest form, a geocache contains a logbook or logsheet for you to sign. Caches may also contain items for trade, but the journey in discovering a geocache is often the greatest reward.

## **Citizenship:** *"My Heart to Greater Loyalty and My Hands to Larger Service..."*

**Life Skills:** Social interaction, caring for yourself and others, spending quality time with family and friends, understanding our role in preserving the environment and developing a sense of pride in our community

People from all age groups can participate in geocaching, including families with children, students, adults and retirees. Geocaching is a great way to bring friends and family together while having fun outdoors.

Writing about the experience online creates a personal journal that connects the cacher with previous and future cachers.

There is also a community service opportunity called "Cache In...Trash Out" (CITO). This concept is simple. When a group goes geocaching they take a trash bag and pick up trash they find along the way and dispose of it properly.

## **Healthy Living:** *"And My Health to Better Living..."*

**Life Skills:** Physical activity, walking, hiking and climbing, safety, clearing your mind and promoting a positive attitude

Geocaching offers a great reason to get outdoors. It combines technology with outdoor adventure and is a great way to explore locations near and far. Combine geocaching with camping, hiking, biking, boating or any number of activities to make them an even more enjoyable experience.

## *"For My Club, My Community, My Country and My World."*

**Life Skills:** Exploring, experiencing the thrill of the hunt, understanding of geography and appreciation of history

Caches often have an interesting background which explains the history of an area or points out an important landmark that may have gone unnoticed. There are geocaches all around the world. They may be at your local park, the end of a long hike, underwater, or on the side of a city street. They are literally all around us.



## **So get out there and go Geocaching the 4-H Way!**

# Geocaching Basics



## Introduction

The word Geocaching refers to GEO for geography and to CACHING (pronounced "cashing" as in a check) and is the process of hiding and finding geocaches. A cache in computer terms usually refers to information stored in memory to make it faster to retrieve, but, the term geocache (or cache) is also used in hiking/camping as a hiding place for concealing and preserving provisions.

Geocaching is a high-tech, entertaining outdoor adventure game for GPS users. The idea is to "hunt" for hidden containers (geocaches) that have been placed in the landscape. Geocaches vary greatly in size and appearance. In the field you will see everything from large, clear plastic containers to film canisters to a fake rock with a secret compartment.

Geocaching is enjoyed by people of all ages, with a strong sense of community and support for the environment.

## Getting Started

1. Create an account on [www.geocaching.com](http://www.geocaching.com)
2. Choose a geocache hunting "nickname"
3. Search site for nearby geocaches
4. Read past logs. You may want to choose another cache
5. Read cache description, note cache details and "hint"
6. Add coordinates for geocaches into your GPS unit
7. "Hunt" your geocaches
8. When found sign finders logbook inside of each cache
9. Take an item, leave an item if you wish
10. Return cache to exact position and condition as it was found
11. Write about your experience on [www.geocaching.com](http://www.geocaching.com)

## Some Geocaching Terms

**Geocoins:** A trackable special coin created by individuals or groups as a signature item/calling card

**Muggles:** non-cachers who do not understand the game and will be present from time to time. Avoid giving away secret cache locations to them.

**Smiley:** You found the cache! 😊

**Trackable Items:** Items that are transported from cache to cache and have a unique tracking number that can be followed on [www.geocache.com](http://www.geocache.com)

**Travel Bugs:** A trackable tag that is attached to an item

**Waypoint:** average of several attempts to set cache coordinates

## Some Finder Log Abbreviations

**BYOP:** Bring Your Own Pen

**DNF:** Did Not Find

**FTF:** First to Find

**SL:** Signed Log

**SWAG:** Stuff We All Get (trader items)

**TFTC:** Thanks for the Cache

**TFTH:** Thanks for the Hide

**TN/LN:** Took nothing, left nothing



## Cache Sizes

**Micro/Nano:** very small - contains only a finders log to sign

**Small:** Small bottles to sandwich-sized containers

**Regular:** A container or ammo can about the size of a shoebox

**Large:** A large coffee can to bucket sized container

**Other:** See cache description for information

## Some Important Tips

- ◆ Carry some form of identification with you
- ◆ Avoid woods geocaching during hunting season
- ◆ Stay with the group and do not geocache alone
- ◆ Youth should ALWAYS geocache with a responsible adult
- ◆ Be courteous to other hikers/bikers and geocachers
- ◆ Stay alert and aware of surroundings, garbage, animals, etc.
- ◆ Watch your footing to prevent falls
- ◆ Be respectful of property and act responsibly
- ◆ Do not cache in "No Trespassing" areas without permission
- ◆ Seek permission where appropriate before hunting caches
- ◆ Wear sunscreen especially on long hikes or all day outings
- ◆ Clean cuts and scrapes right away and apply first aid
- ◆ Wear thick-soled, closed-toed shoes
- ◆ Wear Long pants / jeans to protect from vines and briars
- ◆ Wear bright color shirt - long sleeves are good for brushy areas
- ◆ Avoid poison ivy, sumac, thorns, etc.
- ◆ Geocaching is an outdoor activity - you may get dirty
- ◆ Be honest if you are questioned by law enforcement officers (they are not muggles... many have heard of geocaching)

## Some Important Things To Take Along

Batteries/Device chargers (batteries drain quickly)  
Bug repellent (insects can be annoying)  
Cell phone (emergency calls, navigation, geocache apps, etc.)  
Change of clothes/shoes (especially in wet or muddy conditions)  
Drinking water (stay hydrated especially on very warm days)  
First aid kit (for tending to occasional scrapes and scratches)  
Flashlight (some caches are in logs and other dark spots)  
Food/Snacks (fuel keeps you going)  
GPS Unit (with cache coordinates entered)  
Hand sanitizer wipes (hands will get dirty)  
Ink pen (for writing in finder logs)  
Trader items (collecting these can be great fun)  
Tweezers (for accessing micro/nano cache finder logs)  
Whistle (to blow in case cacher is separated from group)



## Cache In - Trash Out (CITO)

**Cache In Trash Out** can easily happen on every geocache adventure. Bring a trash bag along with you on your walks in the woods and pick up the occasional piece of trash you see on the trail. Even this small act can make a huge difference to the environment.

## Geocaching Benefits

- ◆ Geocaching is fun way to enjoy nature and get some exercise
- ◆ It is a great way for families and groups to spend quality time together and build cooperative relationships
- ◆ It is also a good way to learn about technology and orienteering while you enjoy the great outdoors.

Smartphone catchers can keep track of their finds electronically with your profile on [www.Geocaching.com](http://www.Geocaching.com). However, some people may find keeping a written log is a fun way to compare notes and share your finds with others. A journal of this type is a good way to learn record-keeping skills and enjoy your finds again and again.

[illegible]



# Geocaching Record Book

[illegible]

# Tips for Hiding a Geocache

## Step 1 - Research a Cache Location

Geocaching is just like real estate - location, location, location! It is common for geocachers to hide caches in locations that are important to them, reflecting a special interest or skill of the cache owner. These unique locations on the planet can be quite diverse. A prime camping spot, great viewpoint, unusual location, etc. are all good places to hide a cache. When thinking about where to place a cache, keep these things in mind:

Does it meet all requirements and geocaching guidelines to be listed on the Geocaching.com site? Make sure to review these during your research. Issues of concern include cache saturation, commerciality, solicitation and long-term cache maintenance.

Did you consider accessibility? If it is too visible or too close to busy roads and trails, there is a good chance someone may stumble upon it by accident. It is best to place a cache just off trail to preserve the environment but keep it out of sight of people casually passing by.

Did you seek permission from the land owner or manager? If you place a cache on private land, you must ask permission before hiding your cache. If you place it on public lands, contact the land manager to find out about any rules or restrictions. Please note: You will be in violation of federal regulation by placing a cache in any area administered by the National Park Service (US). The National Park regulations are intended to protect the fragile environment, and historical and cultural areas found in the parks.

Will the location placement cause unnecessary concern? Please use common sense when choosing a location for your cache. Do not design your cache such that it might be confused with something more dangerous.

You are ultimately responsible for the cache so make sure you know the rules for the area where your cache is being placed. Respect the area around your chosen location. Keep in mind that others will be walking in these areas.

Avoid the location of a wild animal nest, or an off-trail with delicate ground cover, too much activity may damage the very nature of why this area is cool.

Do not place caches on archaeological or historical sites. In most cases these areas are highly sensitive to the extra traffic that would be caused by vehicles and humans.

A cache hidden in full view of office or apartment building windows exposes a geocacher to being seen by someone who may think the cache search looks suspicious.

## Step 2 - Preparing Your Cache

### Cache Containers

Start by choosing a container that will withstand the weather all year round. Geocachers have had good success with clear, watertight plastic containers, ammunition boxes, and waterproof boxes often used on boats. You will also want to invest in zippered plastic bags to further protect the cache contents, in case your container does leak. Camouflage tape is available to help your cache blend with surroundings. View sample cache containers at [Groundspeak.com](http://Groundspeak.com)

Whatever the container, make sure to clearly identify your cache as a geocache. Most geocachers mark the cache container with the words "Official Geocache," the name of the cache, and appropriate contact information. The more information you can provide, the better.



## Cache Contents

Next, you will need a logbook. (4-H example on next page). Make sure to place a writing utensil in the cache as well. If you are in an area where the temperature drops below freezing, make sure to provide a soft lead pencil. Pens tend to freeze and are rendered useless. Include a welcome note (on next page) that explains the activity in case someone accidentally finds your cache. This note can also be found on the [geocaching.com](http://geocaching.com) website

Lastly, you can put items for trading into the cache. It is highly recommended, but not necessary. What you place into your cache is up to you, budget permitting. Some ideas of items to give as goodies:

- Disposable camera. Put one in and ask everyone to take a picture and put it back in the cache. Later you can develop the photos and place them online.
- Toys for children. Include action figures, games, playing cards, and more.
- Trackable items such as "travel bugs", "geocoins", etc that have a unique identifying number and can be moved from cache to cache and are logged on Geocaching.com

People of all ages hide and seek caches, so think carefully before placing an item into a cache. Explosives, ammunition, knives, drugs and alcohol are not to be placed in a cache. Respect the local laws.

Food items are always a bad idea. Animals have better noses than humans, and in some cases caches have been chewed through and destroyed because of food items in a cache. Please do not put food in a cache.

## Step 3 - Placing Your Cache

Once you arrive at the location of your hide, it is critical to obtain accurate GPS coordinates. This is the very heart of the activity, after all. Be aware that during bad weather, the accuracy of the GPS unit may be poor. Some GPS units have the ability to take an average set of coordinates. If your device cannot, it is best to mark a waypoint, walk away from the location, then return and mark another waypoint. Continue marking waypoints (at the location, around 7 - 10 times) and then select the best waypoint for the most accurate cache location coordinates.

Once you have your waypoint, write it in permanent marker on the container and in the logbook. Make sure you have a copy to bring back with you. Write a few notes in the logbook if you like, place it in a zippered plastic bag for extra protection, and place it in the cache container.

## Step 4 - Submitting Your Cache

Take time to review the Geocaching Listing Guidelines online at [www. Geocaching.com](http://www.Geocaching.com) again. After placing your cache, does it still meet all requirements for placement? If so, fill out the online form, paying careful attention to the helpful notes provided. Write a description that attracts geocachers to your location, including images of interest.

Add descriptive attributes so that others can make a quick assessment of your cache. For example, is this area dog-friendly? Is the hike over an hour long? Is the area accessible in a wheelchair? Is a boat required? Double-check the accuracy and the format of your work and make any needed edits. After a review, your cache will be published for the general public.

## Step 5 - Maintaining Your Cache

Once you place the cache, it is your responsibility to maintain the cache and the area around it. You will need to return as often as you can to ensure that your cache is not impacting the area negatively, and to check that the container is in good shape.

Does the area look disturbed? Are visitors disrupting the landscape in any way?

If you eventually have concerns about the location, remove the container and make appropriate changes to your online listing.



## Groundspeak official statement for inside of cache container

# GEOCACHE SITE - PLEASE READ

**Congratulations, you've found it! Intentionally or not!**

What is this hidden container sitting here for?

What the heck is this thing doing here with all these things in it?

It is part of a worldwide game dedicated to GPS (Global Positioning System) users, called Geocaching. The game basically involves a GPS user hiding "treasure" (this container and its contents), and publishing the exact coordinates so other GPS users can come on a "treasure hunt" to find it. The only rules are: if you take something from the cache, you must leave something for the cache, and you must write about your visit in the logbook. Hopefully, the person that hid this container found a good spot that is not easily found by uninterested parties. Sometimes, a good spot turns out to be a bad spot, though.

**If you found this container by accident:**

Great! You are welcome to join us! We ask only that you:

- Please do not move or vandalize the container. The real treasure is just finding the container and sharing your thoughts with everyone else who finds it.
- If you wish, go ahead and take something. But please also leave something of your own for others to find, and write it in the logbook.

If possible, let us know that you found it, by visiting the web site listed below.

Geocaching is open to everyone with a GPS and a sense of adventure. There are similar sites all over the world.

The organization has its home on the Internet. Visit our website if you want to learn more, or have any comments:

**<http://www.geocaching.com>**

If this container needs to be removed for any reason, please let us know. We apologize, and will be happy to move it.

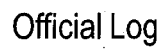
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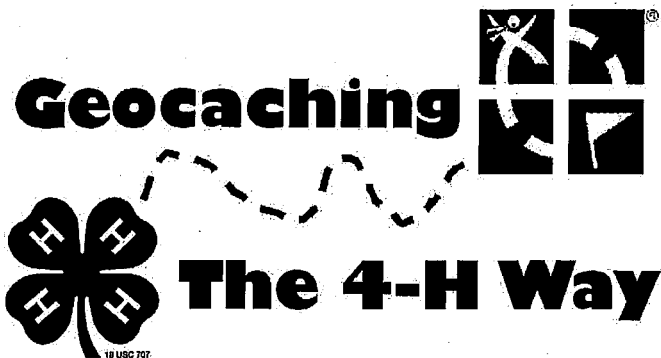
**Labels for the outside of the cache container**

**OFFICIAL GEOCACHE**  
**Do Not Remove**

**OFFICIAL GEOCACHE**  
**Do Not Remove**

**OFFICIAL GEOCACHE**  
**Do Not Remove**





## Project Record Sheet

\_\_\_\_\_ (Year)

4-H Member Name \_\_\_\_\_

Number of Years in Project \_\_\_\_\_

1. How many times did you go geocaching this year? \_\_\_\_\_

2. How many geocaches did you find this year? \_\_\_\_\_

3. Who are some people who went with you?

\_\_\_\_\_  
\_\_\_\_\_

4. Where are some of the places you went?

\_\_\_\_\_  
\_\_\_\_\_

5. What is a your favorite find this year?

\_\_\_\_\_

6. Did you find any trackables (travel bugs, coins, etc?) \_\_\_\_\_

7. Did you record your finds online at Geocaching.com? \_\_\_\_\_

8. Did you hide any geocaches? \_\_\_\_\_ If so, how many? \_\_\_\_\_

9. What is your favorite part about "Geocaching the 4-H Way" adventures?

\_\_\_\_\_  
\_\_\_\_\_

Please complete the reverse side of this page also

## **Science Mission Mandate**

***"I Pledge My Head to Clearer Thinking..."***

**While participating in this activity did you use any of the following?** (Please circle all that apply)

Critical thinking, problem solving, decision making, connecting with the environment, utilizing GPS technology, learning orienteering, enjoy participating in a high-tech outdoor adventures, journaling online.

Other(s): \_\_\_\_\_

## **Citizenship Mission Mandate**

***"My Heart to Greater Loyalty and My Hands to Larger Service..."***

**During this activity did you experience any of the following?** (Please circle all that apply)

Social interaction, caring for yourself and others, spending quality time with family and friends, understanding our role in preserving the environment, developing a sense of pride in our community, picking up trash (CITO) as a community service

Other(s): \_\_\_\_\_

## **Healthy Living Mission Mandate:**

***"And My Health to Better Living..."***

**Did you do any of the following?** (Please circle all that apply)

Physical activity, walking, hiking and climbing, practicing safety, clearing your mind, promoting a positive attitude

Other(s): \_\_\_\_\_

***"For My Club, My Community, My Country and My World."***

**Did you encounter any of the following?** (Please circle all that apply)

Exploring, experiencing the thrill of the hunt, understanding of geography, appreciation of history

Other(s): \_\_\_\_\_

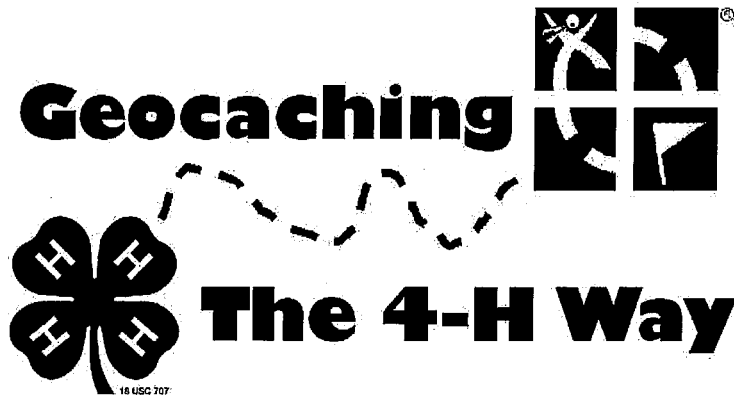
**Is there anything you would like to add about your "Geocaching the 4-H Way" experience(s)?**

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## **Some Project Exhibit Suggestions**

**Create a poster or notebook on some aspect of Geocaching.** Some topics might be:

- Geocaching Safety Tips
- Helpful Geocaching Tools
- How to Prepare for a Geocache Outing
- How to Read a Compass
- How to use coordinates on a GPS device to find geocaches
- Or some other interesting geocache topic, etc.

**Create a Record Book/Notebook to keep track of all of your geocache adventures.**

Include log records, photos of your finds (such as trackables, geocoins, etc.)

**Create a geocache that is ready to hide**

Include official log for finders to sign, cache explanation, tradable items, First to Find reward, etc. Be sure to decorate it with camouflage paint or tape to blend with the intended hiding location.

**Plan and conduct a geocaching outing and document the event with photos.**

Plan a "Cache In Trash Out" Community Service project.  
Include finds and interesting details of the adventure.

**Display a collection of your favorite geocache found items**

Use your imagination and create your own project related to geocaching.  
Each year should show development and increase in scope and difficulty.



# **A Suggested Geocache Adventure**

## **How To Set Up A Temporary Geocache For An Educational Session**

Use the "Tips for Hiding a Geocache" steps 1-3 to guide you where to place the caches and what size will fit best in the hiding spot. (You do not need to complete steps 4-5 as this is not a permanent cache)

Make sure GPS units have enough power or replace batteries. Make sure to have spare batteries on hand.

Load coordinates on the GPS units or provide a sheet to the participants to enter in the coordinates during the class.

Turn on the GPS units prior to the first session so they have time to retrieve satellite data. (10 to 15 minutes before the session should be enough time)

## **Geocaching Class Talking Points**

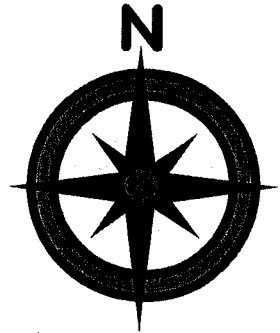
Use the "Geocaching Basics" sheet for opening talking points to explain geocaching.

Go over some geocaching terms: Examples- Geocoin, Muggles, Waypoints, etc.

**MAKE SURE TO COVER WHAT POISON IVY LOOKS LIKE!!!!!!**

How to do geocaching at home

Cache In-Trash Out



## **Time To Go Geocaching!**

Divide whole group up into smaller groups based on number of GPS units available.

Ask each group to create a group name.

Give every group a Geocaching Record Sheet (that lists all of the possible caches) and a pencil

Teach them the controls of the GPS unit they are utilizing in this class.

Give each group their first cache number to go find so that each group starts at a different cache location.

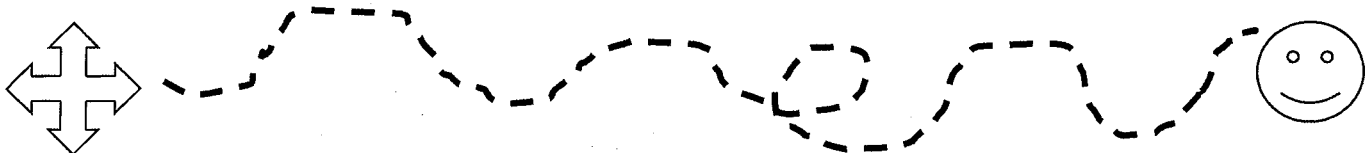
Make sure to emphasize that they need to be secretive and don't let people see them.

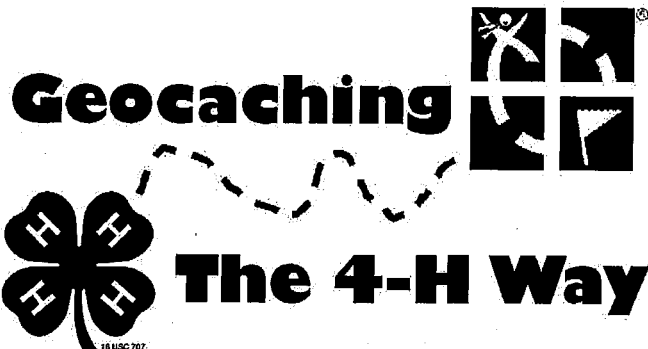
They need to go in their order given so groups don't bunch up

There may be things that they need to do at a cache, like sing a song.

They can put the cache back and walk away from the site and find a different spot to complete their task.

## **Enjoy the thrill of the hunt!**





## Evaluation

Completion of this form is voluntary and anonymous

### Science Mission Mandate

*"I Pledge My Head to Clearer Thinking..."*

While participating in this activity did you use any of the following? (Please circle all that apply)

Critical thinking, problem solving, decision making, connecting with the environment, utilizing GPS technology, learning orienteering, enjoy participating in a high-tech outdoor adventures, journaling online.

Other(s): \_\_\_\_\_

### Citizenship Mission Mandate

*"My Heart to Greater Loyalty and My Hands to Larger Service..."*

During this activity did you experience any of the following? (Please circle all that apply)

Social interaction, caring for yourself and others, spending quality time with family and friends, understanding our role in preserving the environment, developing a sense of pride in our community, picking up trash (CITO) as a community service

Other(s): \_\_\_\_\_

### Healthy Living Mission Mandate:

*"And My Health to Better Living..."*

Did you do any of the following? (Please circle all that apply)

Physical activity, walking, hiking and climbing, practicing safety, clearing your mind, promoting a positive attitude

Other(s): \_\_\_\_\_

*"For My Club, My Community, My Country and My World."*

Did you encounter any of the following? (Please circle all that apply)

Exploring, experiencing the thrill of the hunt, understanding of geography, appreciation of history

Other(s): \_\_\_\_\_

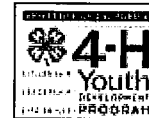
Is there anything you would like to add about your "Geocaching the 4-H Way" experience(s)?

\_\_\_\_\_  
\_\_\_\_\_



# CLOVER SAFE

AGRICULTURE AND NATURAL RESOURCES  
ENVIRONMENTAL HEALTH AND SAFETY



#21

## HIKING SAFETY

*Clover Safe notes are intended primarily for 4-H volunteers and members nine years and older.*



*Photograph Courtesy of  
Siskiyou County 4-H  
Program*

4-H members participate on hikes that take place in terrain ranging from relatively flat land to steep, rugged topography and from wetland to desert conditions. Precautions to prevent injuries vary somewhat depending on the type of terrain and habitat encompassed by the path of the hike. Common injuries that are related to hiking include strains, sprains, cuts, bruises, insect bites, and sunburn. By taking several simple precautions and becoming familiar with the area and path to be hiked, 4-H members can control and/or reduce exposure to conditions that may cause injuries.

The following precautions should be followed to reduce the potential for incurring hiking-related injuries:

- Good safety practices are to (1) tell someone (that is not participating) the hiking route and when the hikers should return or complete the hike, (2) hike with a group or partner in remote areas, (3) bring adequate water for the weather conditions, and (4) carry a first aid kit and cell phone or other communication device while hiking.
- When possible, know the route(s) you will be taking during your hike. Carry a reference hike-route or -location map, if necessary.
- In case of an emergency, know how to direct emergency responders to your location or transport an injured person to the closest medical facility.
- Do not wander from your hiking group or partner.
- If you notice that a member of your hiking group is missing, immediately notify your project leader, parent, or guardian.
- Always treat hilly and mountainous topography with caution. Carefully pick the spots where you intend to step. Be careful of dislodging rocks onto other hikers below or following you.
- Walk carefully in uneven terrain, especially when the ground surface may be obscured by vegetation or during twilight or at night.
- Dress appropriately for the weather conditions and hiking path terrain: as necessary wear a hat, long pants, boots or sturdy shoes, jacket, and skin and eye protection (i.e., sunscreen and sunglasses).
- Use insect repellants containing compounds such as DEET (repels insects) on exposed skin and permethrin (kills many insects on contact) on clothing only.
- Rock climbing without proper experience or equipment is dangerous and ill advised.
- Always be aware of potential temperature extremes associated with the hiking path and area. Dress appropriately for extreme temperatures that may cause heat or cold stress.
- Be particularly alert for falling rocks, rock slides, or rock falls when hiking in proximity to cliff faces or steep rock outcrops. Wear a safety hat when hiking in areas where falling rocks are common.
- When hiking in wet areas or in proximity to water, beware of stepping onto slippery rocks, slopes, or ground.
- When hiking in wetland areas, be cautious of stepping onto unsupported vegetation, soft mud, or quicksand. Use a pole or branch to probe the path surface ahead of you when crossing wetland areas.
- Be conscious of tidal cycles when hiking in coastal and estuarine wetland areas. Consult tide tables or similar reference materials and plan your hike accordingly.
- Whenever a lightning threat becomes apparent, move to a low spot and seek shelter immediately.
- If you encounter a snake, remain calm and back away slowly. Always give snakes plenty of room to escape from you. Never approach, tease, corner, or poke at any snake.
- Closely look for snakes or insects before placing your hands on objects such as rock outcrops or trees or picking up objects from the ground (i.e. rocks, plants, leaves, etc.)
- Thoroughly inspect the area where you intend to sit, particularly around stumps, logs, boulders, or rock outcrops.
- If you experience an insect bite or sting, wash the wound with soap and water, apply an antiseptic, and cover the wound with a band aid or clean dressing. Carefully remove stingers from skin by using tweezers and then clean and dress sting wounds. Never scratch an insect bite or sting.
- Promptly seek professional medical attention if you suspect you are experiencing severe venom allergic reaction symptoms.
- If a snakebite occurs: calm the victim, wash the area of the bite with soap and water, apply a cold dressing over the bite area, and immediately transport the victim to the closest medical facility for professional treatment. Also, remove jewelry, watches, and tight clothing in preparation for tissue swelling.

## **I'm a 4-H Project Leader: Now What Do I Do?**

### **How do I know who is in my project?**

- Your club organizational leader will provide you with the names, addresses and phone numbers of the members enrolled in the project for which you are the leader.
- If you are working on the county level, contact the UCCE for the list of project members.
- The organizational leader may indicate to you if any of the youth have special needs. At your first project meeting, note any other youth that may have special needs.
- You may wish to consult with the parent or your 4-H Youth Development Agent as to how to work with a special needs child.

### **How often should I hold project meetings?**

It is recommended you hold 4-6 meetings that each last 1½ to 2 hours in length. Some projects require more meetings or a longer meeting time to accomplish your goals. Some projects, such as leathercraft, may lend themselves to individual project work as members progress on their projects. In this case, you should hold several introductory meetings for all members and then set up a schedule of time for them to sign up for individual help.

### **When do I start?**

Get started as soon as possible! Members' interest in a project is most keen when they are signing up for a project and when they get their project books.

### **How do I cover the cost of project meetings?**

- There is a wide variety of means for covering the cost of project meetings. Some methods used include:
- Each member pays for their share of the expenses or provides a portion of the supplies.
- The club agrees to cover expenses using funds from their treasury. Approval in advance is needed for this.
- Members and leaders can solicit donations/supplies from area businesses.
- Sometimes funds from sources outside your club may be available to cover your project meeting costs.

### **How do I establish a project meeting schedule?**

First, determine when you are available to work with project members. Then determine an initial project meeting date by consulting with your project members.

Publicize the date using one of the following means:

- County and/or club newsletter
- Club meeting or leader association meetings
- Postcards or phone calls to project members

You may not be able to schedule an initial meeting that everyone can attend. Establish a time to meet with those unable to attend before you hold your second project meeting.

### **Where do I hold project meetings?**

Typically project meetings are held at project leader homes, schools, or community buildings. For more information on facility adaptability and liability concerns contact your 4-H Youth Development Agent.

### **What safety precautions do we need to consider?**

Consider the type of safety issues your particular project involves. Request and secure necessary safety items such as ear protection, eye protection and head protection.

### **How do I let others in my club or other clubs know I am a project leader?**

Prior to enrollment ask for time on your club's meeting agenda to let families in your club know you're a project leader and to share some things the kids could do in the project if they enrolled in it. When the project materials are handed out, take the opportunity to inform or remind members that you are their project leader and set an initial meeting date with the group. If no one in your club is in your project, you may wish to offer your services to a neighboring club. Talk to your club organizational leader or county 4-H Youth Development agent about this opportunity.

### **How do I prepare for the first meeting?**

You may want to establish a 4-H resource box where you keep your project materials and any additional resources you will be using. Take time to become familiar with your project literature and talk to others who were project leaders for this project to find out what activities the members enjoyed.

### **What should I do at the initial project meeting?**

- At the initial project meeting, here are some ideas of what you might want to cover:
- Find out what the members want to learn and accomplish in the project. The project literature is an excellent source of ideas.
- Review the safety practices that members will need to follow.

- Do an introductory activity related to the project so the members get to know one another
- Have a small project the members can complete and take home
- Talk about how the project meeting supplies will be paid for. Experienced leaders have found it easiest to charge a small fee to cover the cost of the expenses.
- Assess when members are available for additional meetings. You may wish to ask the parents or members to bring along their calendars of family activities.
- Encourage parents to participate in project meetings, especially the initial meeting.

### **What does a typical project meeting look like after the initial orientation?**

Use the experiential learning model (found in the introductory pages of your Helper's Guide) to plan your project meeting. The project helper's guide will provide suggestions for designing a project meeting. Here are some suggestions for each section of the model:

#### **Do**

- Plan an activity to focus the project members on what they'll be doing today. Work on the project for that meeting.

#### **Reflect**

- Review the process completed
- Discuss what worked and didn't work.
- Talk about how any problems that arose were solved.
- Assist members in documenting their project work for inclusion in their record books/portfolios.

#### **Apply**

- Ask the project member the following questions:
- What else have you seen that is similar to this?
- How can you apply what you learned today to other situations?

### **What resources are available to help me?**

- 4-H Project Literature – You will receive project literature through your 4-H club or the UW-Extension office. Typically there is a helper's guide and member literature for three to four levels.
- Other People in my Club & County – There are a number of people in your county who would be willing to share project ideas and tips with you.

These include:

- Project leaders in other clubs
  - County Staff
  - Older youth who have been involved in the project
- 
- **Media Collection & Public Libraries** – Additional resources can be obtained from the Cooperative Extension Media Collection. They have videos, skillathons, displays and resource packages available to support a variety of projects. There is a user fee per item you or your club will be responsible for. You can view their catalog at their website <http://www.uwex.edu/ces/media/>. Check with your local public library to find out what resources they may have or that you can obtain through inter-library loan.
  - **4-H Website** – Wisconsin 4-H is continually adding more information and activities to their website. Visit this site at [www.uwex.edu/ces/4h/onlinepro/](http://www.uwex.edu/ces/4h/onlinepro/). You may wish to check out websites from other state 4-H programs also.
  - **Volunteer Leaders Conferences** – Review each issue of your county's newsletter to learn about training sessions for project leaders offered by your county, district or at statewide events. Sessions focusing on new project literature are typically offered at the State 4-H Volunteer Leader Conference held every other year. Periodically statewide conferences focusing on specific project areas are offered in addition to sessions at the volunteer conferences. You can also exchange ideas with other leaders at statewide Field Day.
  - **Field Trips** – Youth always enjoy the opportunity to see firsthand how things are done and how they work. Consider taking your project group on a field trip or tour of a local business or company to enhance their project experience. An example would be taking your dairy members to a cheese factory or your foods group to a local bakery.
  - **Local Experts** – Bring in a local "expert" to share their ideas and experiences with your group. One example would be asking a Master Gardener to share information on choosing perennial or trimming shrubs at one of your project meetings.
  - **Magazines** – Many leaders have found creative ideas to supplement those in the project literature in magazines they have or those at the public library.

### **How can I incorporate activities not included in the project guide?**

We encourage you to use the ideas in the project literature as they have been successfully used with youth. If you have some additional activities you would like to incorporate, consider the following criteria:

- Of interest to kids
- Developmentally appropriate
- Incorporate the experiential learning model
- Youth and adults are involved in determining what will be done
- Enhances the development of member life and project skills
- Research based source of content utilized

### **What is the relationship between project work and the county fair?**

The County Fair is an opportunity for an independent evaluation of life and project skills a member learned through completing a project. County fair entries typically match the activities included in the project literature and may include other activities that are being emphasized in your county. One of your roles is to help maintain the focus of members and parents on the goal of 4-H, which is to develop blue ribbon kids. Talk with members about what they learned about each of their fair entries from the judging process. Help members celebrate their accomplishments regardless of the color of ribbon each project member received at the fair. This may be done through individual encouragement or at a meeting following the fair. While entering and displaying a project at the County Fair is the traditional method of public affirmation, there may be other means of exhibition such as a club tour, open house, community celebrations or others.

### **Who can I go to if I need someone to help me during the project meetings?**

If you are leading beginning level project meetings, ask older members in the project to help you. This is a great leadership experience for them! Parents are another excellent source of help. Don't hesitate to ask them to stay for the meeting and be actively involved in their child's project work.