

# GPS Receivers & Geocaching Details



Prepared by:

VirginiaGeospatial  
EXTENSIONPROGRAM  
[cnre.vt.edu/gep](http://cnre.vt.edu/gep)



With support from:



NSF DUE-0903270

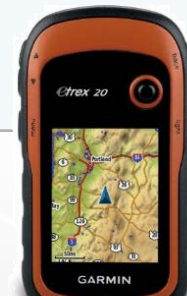
in partnership with:



Geospatial Technician Education Through Virginia's Community Colleges (GTEVCC)


# GPS Receivers

	eTrex H	eTrex Venture HC	eTrex 10	eTrex Legend HCx	eTrex Oregon 550T
High sensitivity chip	Yes: GPS	Yes: GPS	Yes: GLONASS +GPS	Yes: GLONASS +GPS	Yes: GPS
Geocaching friendly	No	Yes	Yes	Yes	Yes
Area Calculation	No	Yes	Yes	Yes	Yes
Color Screen	No	Yes	No	Yes	Yes
Interface-USB/Serial	Serial	USB	USB	USB	USB
Price (amazon.com)	\$85	\$125	\$115	\$190	\$509



# What does “Geocaching friendly” mean?

For Garmin units:

- Ability to download waypoint coordinates from geocaching.com
- GPS receiver has a geocache menu
- Shows downloaded geocaches 
  - Many show if they have been found or not
- Can select “Go To” function which gives navigational directions towards geocaches
- Will also show any other information downloaded with the geocache in comment field



# Introduction to Geocaching

- Geocaching is a high-tech entertaining adventure game (scavenger hunt) for GPS users
- The idea is to “hunt” for hidden containers (geocaches) that have been placed in the landscape (virtual orienteering)
- Pick a prize from the geocache and leave a prize...
- Geocaching is enjoyed by people of all ages, with a strong sense of community and support for the environment



[www.geocaching.com](http://www.geocaching.com)



# Geocaching

- Geocache examples



Micro cache



Example of contents

# Geocaching

- Create account on [www.geocaching.com](http://www.geocaching.com)
- Search for geocaches
- Download geocaches to your GPS unit
- “Hunt” your geocache
- Sign logbook in cache
- Take an item, leave an item
- Return cache to exact position & condition in which it was found
- Write about your experience on [www.geocaching.com](http://www.geocaching.com)

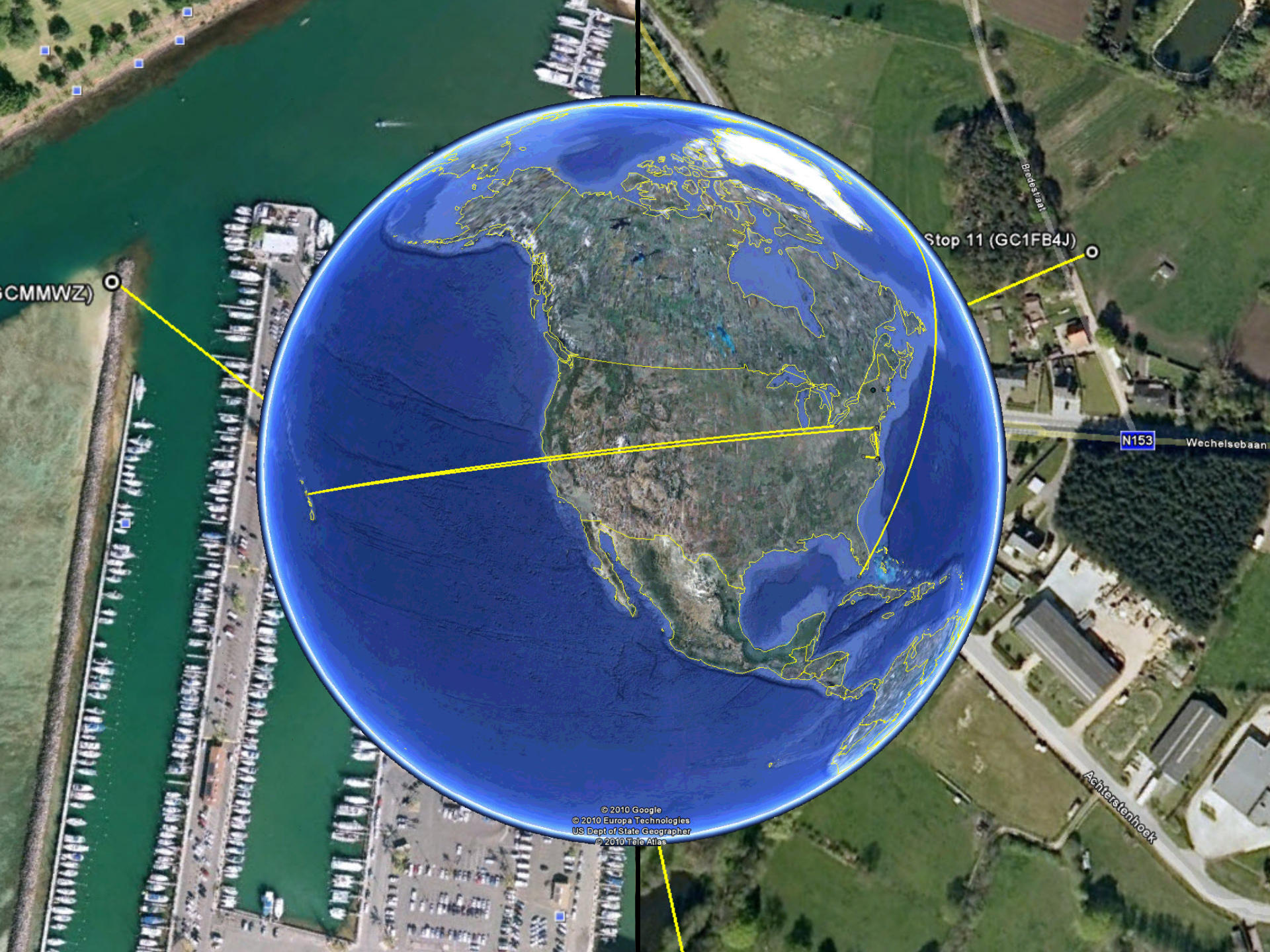


# Trackable Items

- Items that have a tracking number & can be followed on [www.geocache.com](http://www.geocache.com) (via GoogleEarth...)







CMMWZ)

Stop 11 (GC1FB4J)

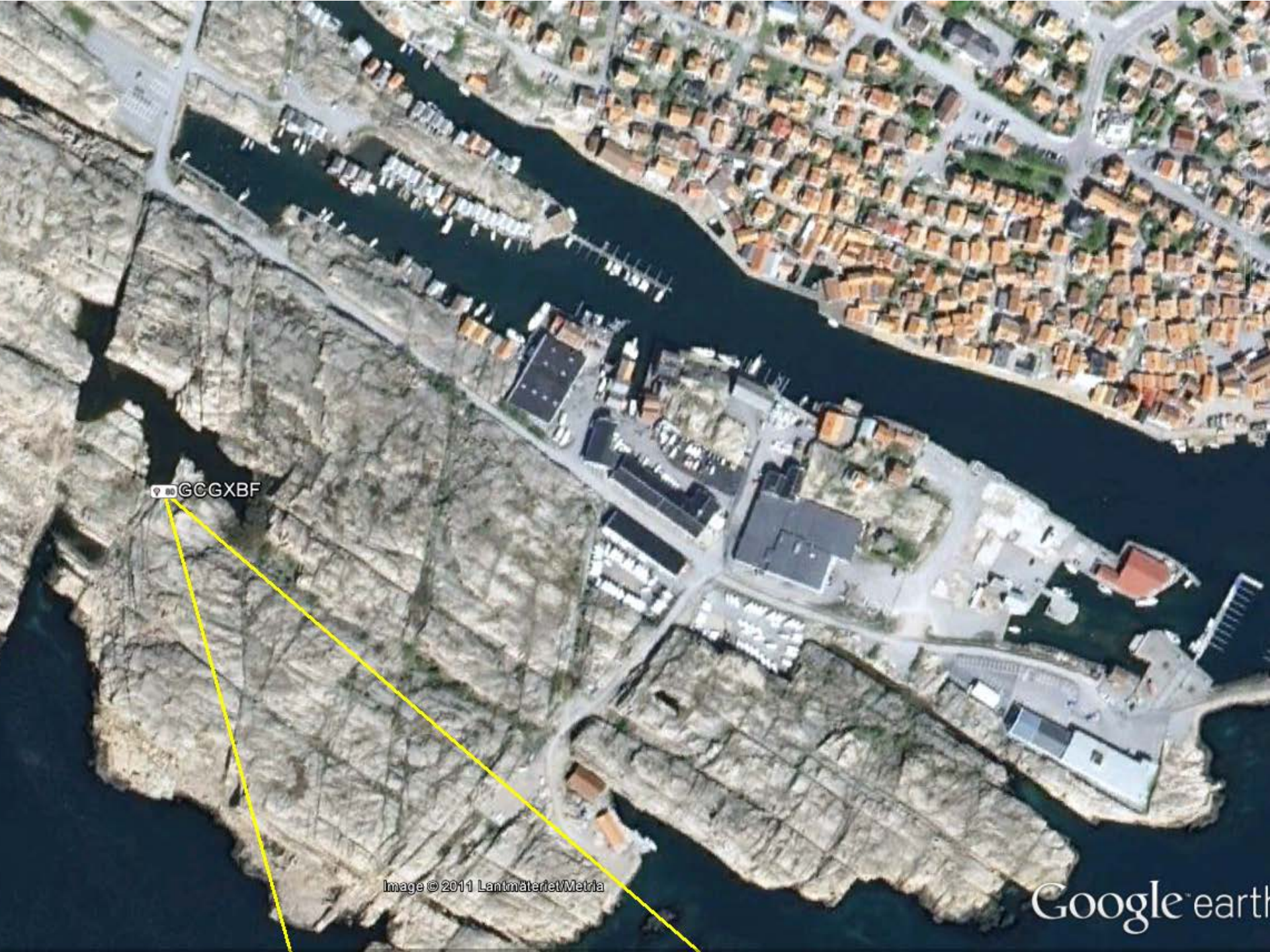
N153

Wechelsebaan

Achterstenhoek

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GCGXBF





74 GC2QEDD

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GC1AH8K

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Google earth



# Trackable Items

- Geocoins
  - Special coin created by individuals/groups as a signature item/calling card
  - Has unique tracking ID
- Travel Bugs
  - A trackable tag that is attached to an item
  - The travel bug is a standard design (a travel bug looks like a dog tag...)



# Geocaching is fun... This activity is also a “teachable moment”

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- The Virginia Geospatial Extension Program and VirginiaView have developed a geocaching exercises that incorporate STEM-based learning with geocaching
- This is available for download from the VirginiaView portal ([www.virginiaview.net](http://www.virginiaview.net)) under the <educational resources> section
- Geocoins are available by request from VirginiaView (complete the online request form available on the Website)



# Geocoins & Travel Bugs





# Establishing a New Geocache

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- Do you need to start a new cache in order to be a geocacher?
  - Absolutely not!
  - There are already over 1,700,000 established geocaches to choose from!
  - There is likely an active geocache near your school already!
  - There are over 80 geocaches within a 3 mile radius of Virginia Tech!



# Information & Tips for Creating a New Geocache

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- If you do want to start a new cache, then there are some guidelines that you need to follow...
- <http://www.wikihow.com/Create-and-Hide-a-Geocache>
- Are geocaches are allowed in your proposed location?
  - If it is private property, you will need to get permission from the land owner
  - Some park systems require permits, so check with park management to make sure a permit isn't required, or obtain one if it is.
  - No geocaches on NPS lands!



# Any Questions?

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John McGee

Geospatial Extension Specialist

[jmcg@vt.edu](mailto:jmcg@vt.edu)

540-231-2428

