

# Forestry 101

## GPS in Forestry

By Doug McLaren

The newest acronym to come into the forestry tool box of terms during recent years is GPS (Global Positioning System). This newest technology has provided forestland managers a time-saving device when completing forest surveys of all types. GPS technology is based on 24 satellites that are located some 12,000 miles in the sky to provide exact location coordinates on the face of the Earth in the format of an age-old navigational system of latitude and longitude. The forester utilizes the information received from these GPS satellites to save tremendous amounts of time in completing the initial question of any forest survey, "How large is the forest boundary?" The forester only needs to locate the corners of the property, and he or she can quickly and accurately determine the size and location of the forested property in question. When the property is located either on a topographic map or an aerial photograph, the forestland manager is quickly able to initiate other surveys such as permanent inventory plots. Revisiting these saved locations in a GPS unit makes updating management plans more efficient and time saving for both the forester and landowner.

But what about the forest landowners themselves? Can GPS assist them in their work and questions that they have concerning their forested properties? Yes! GPS is a rather user-friendly and inexpensive tool to include in the management of all your forested and agricultural properties. GPS units for the novice forest landowner can be purchased for less than \$200 and can provide information about the location of property lines, land acreage, road locations, and other points of interest found on the property. If the landowner would like to map the information, additional mapping software can be purchased or utilized from the Web. These electronic maps can have the GPS data downloaded to them and then be utilized in the designing, updating, and future referencing of their forest management plan.

These less expensive GPS units purchased by landowners provide information that is not defined as exact. The units discussed will have an error of nearly 30 feet, but for simple referencing, they provide adequate measurement for the forest landowner. Professional foresters will typically use a more precise GPS unit with allowable errors that are often only within a foot.

It can be seen that forest landowners might utilize the full capabilities of their GPS unit quickly and then ask themselves the question, "What else can I use this GPS unit for?" One very interesting and ever expanding activity that can be used worldwide is called "geocaching" ([www.geocaching.com](http://www.geocaching.com)). Geocaching is a form of the old scavenger hunt game, where you are given clues to the location and you then attempt to find the "buried treasure." The Web provides the latitude and longitude coordinates of the treasure and then you seek the location with these coordinates placed in your GPS. Nearly 500,000 caches are found in 200 countries. New ones, many already located in your local community, are set out weekly.

To find more information concerning how GPS technology works and how it is being used in our everyday lives, simply go to a Web search engine and type in GPS. Be careful—using a GPS can become habit forming.

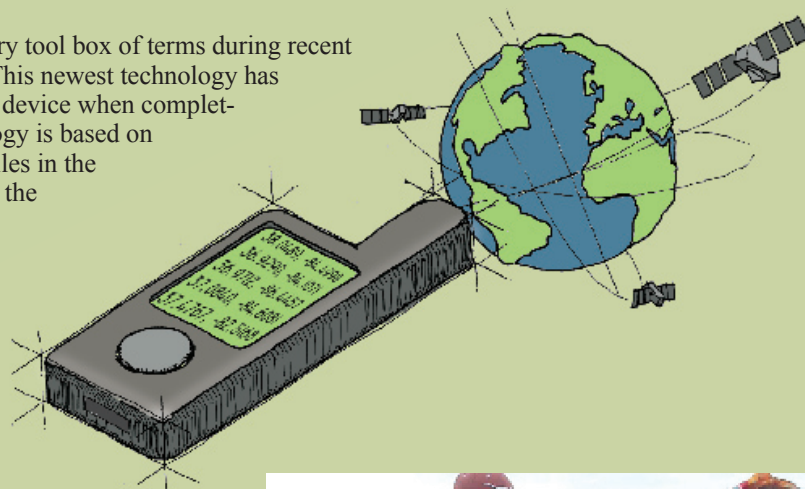


Photo courtesy: Doug McLaren

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