



# Adventure Cycling Association

## GPS Data Quick Start

### Introduction

If you are accustomed to managing GPS waypoints and routes with a PC or Mac program, this quick start guide may be all that you need before you head out. The *User Guide* contains more details.

The waypoint files are keyed to the maps of the routes in the Adventure Cycling National Bicycle Route Network. We have made waypoints for each turn in the narratives and each facility in the service directories.

Share your experiences, ask questions, and maybe answer a few on the Adventure Cycling Forum GPS Discussion. To find out more, go to:  
[www.adventurecycling.org/forums/intro.cfm](http://www.adventurecycling.org/forums/intro.cfm)

Disclaimer: Adventure Cycling strives to keep its waypoint information up to date. However, features are continually changing, so the data may not reflect the latest modifications and/or additions. You are solely responsible for safe navigation and the prudent use of this data.

### The Waypoint Files

We supply the files in three formats:

- *MapSource*, for Garmin Corporation's MapSource™ program only (.mps file extension)
- *OziExplorer*, comma-separated-value text for OziExplorer and many other shareware and freeware programs (.wpt and .rte file extensions)
- *GPX*, XML text for TopoGraphix Corporation's ExpertGPS, Magellan MapSend™ and other programs (.gpx file extension)

Most other GPS programs can read at least one of these formats. If yours cannot, get a utility program that translates formats. The *User Guide* describes one: the free G7ToWin.

Create a folder for the Adventure Cycling files. Download the files and extract them from their zipped packages into this folder.

The file names indicate the route, the section, the release version, and the format. A typical file is named NT04v001.mps.

*NT*, indicates the Northern Tier route.

*04*, indicates Section 4.

*v001*, indicates the first release of this file.

*mps*, is the MapSource format. OziExplorer files use *wpt* for waypoints and *rte* for routes. GPX files use *gpx*.

Because you will be editing the waypoints, we recommend that you make these files read-only to prevent inadvertent saving of changes. Another option is before opening the files, duplicate them elsewhere on your hard driver. (Waypoint names are vital to the correct sequence of waypoints.) Save your changes in your own files.

### Using the Waypoints and Routes

Select the files that cover your route and load them into a GPS data program. Build GPS routes for each day of riding and upload them to your GPSR.

### Waypoint names

To identify the waypoints of interest, it helps to know how we have named them. Their names are unique; you may load any combination of waypoint files without conflicting names.

A waypoint name contains exactly six characters chosen to encode its position on the Adventure Cycling map when sorted alphabetically. An example waypoint name is E011C0.

*Character 1* identifies the ACA route. The key for all routes is:

<b>A</b> Atlantic Coast	<b>N</b> Great Parks North
<b>B</b> Tidewater Potomac	<b>P</b> Lake Erie Connector
<b>C</b> Great Parks South	<b>Q</b> Grand Canyon Connector
<b>D</b> Great Rivers South	<b>R</b> Green Mountains Loop
<b>E</b> North Lakes	<b>S</b> Florida Connector
<b>F</b> Northern Tier	<b>T</b> Underground Railroad
<b>G</b> Pacific Coast	<b>U</b> Adirondack Park
<b>H</b> Southern Tier	<b>V</b> Allegheny Mountains
<b>J</b> TransAmerica	<b>W</b> Washington Parks
<b>K</b> Western Express	<b>X</b> Utah Cliffs
<b>L</b> Lewis & Clark	<b>Y</b> Sierra Cascades
<b>M</b> Great Divide	

*Character 2* identifies alternate routes. 0 stands for the main route and 1, 2, 3, ... Z for alternates. (We use letters A – Z, omitting I and O, when we run out of digits.) E0 for the North Lakes main route, E1 for its Manitowoc alternate.

*Character 3* identifies a section, that is, the part of a route printed on one sheet. This character counts from the beginning to the end of the whole route.

Waypoints named E01... are on the North Lakes main route, section 1.

*Characters 4, 5, and 6* identify waypoints in narrative sequence when riding the route “forward,” that is, in the sequence of the panels on the map.

## Waypoint descriptions

The waypoints’ descriptions are intended to help you locate them on the paper map, choose which to use for your GPS routes, and create meaningful names for them.

*Intersections:* The printed narrative can say “turn right onto US 97” because it has separate directions for riding each way. However, a GPS waypoint serves both directions; thus we identify intersections by both roads, for example, “SR 1804/US 97.” When riding forward, in the sequence of the panels on the map, this means “ride from SR 1804 onto US 97.” When riding the other way, read the description from right to left: “ride from US 97 onto SR 1804.” The pointer in your GPSR shows which way to turn.

*One-way streets:* Where one-way streets require separate routes, the descriptions include, for example, EB and WB for east- and west-bound waypoints. Ignore those marked for the direction you aren’t going.

*Off route:* “# ” begins the description of an off-route campground or town.

*Elevations:* Descriptions include elevations of the waypoints in hilly areas.

*Services:* We use abbreviations where the name or symbol of the service needs amplifying:

<b>AS</b>	all services	<b>M</b>	hotel/motel
<b>B&amp;B</b>	bed & breakfast	<b>NB</b>	northbound
<b>BS</b>	bike shop	<b>R</b>	restaurant
<b>CG</b>	campground	<b>RA</b>	rest area
<b>EB</b>	eastbound	<b>SB</b>	southbound
<b>FA</b>	fishing access	<b>SP</b>	state park
<b>G</b>	grocery	<b>SS</b>	service/gas station
<b>HS</b>	hostel	<b>WB</b>	westbound
<b>L</b>	Library		

## Meaningful waypoint names

Our waypoint names, although good at keeping the waypoints in riding order, are not much use on the bike. You would probably rather see “7.2 miles to AMERY” than “7.2 miles to E011C0.”

Start a new file for the waypoints that you will use on your ride. Copy those waypoints from the Adventure Cycling files. Select each waypoint and give it a name that is meaningful for your riding direction and your own preferences. Observe the length limit—probably six to ten characters—for your GPSR and do not duplicate the name among the waypoints that you intend to use at once. The waypoint descriptions will help, as will the narrative and service directory on the printed map.

## Routes

We include GPS routes in the published files to make the ACA route stand out on the map. They might also serve as sample routes to help you create the actual routes for a day’s riding.

Like waypoint names, GPS route names are unique—not duplicated anywhere in the Adventure Cycling routes—so that you can combine any ACA routes in your computer without conflicting route names. GPS routes use the same alphabet and naming convention as do waypoints. For example, a GPS route might be named F031C2:

*Character 1* identifies the ACA route. F for Northern Tier.

*Character 2* identifies alternates within the ACA route.

*Character 3* identifies a route section, that is, the part of a route printed on one sheet.

*Characters 4 and 5* identify the panel number as it appears on the section map. (The Great Divide Mountain Bike Route divides its maps differently.)

*Character 6* identifies different GPS routes when more than one appear on a map panel.

Thus F031C2 names the Northern Tier route, main route, section 3, panel 46, second GPS route on that panel.