

## Using Google Earth to Map Golf Courses For Integration With GolfTraxx

This is a simple primer for using Google Earth to map a golf course for “Extra” Landmarks for use with GolfTraxx. Once you have created a map, simply email the .kml file to [frank\\_debenedetti@yahoo.com](mailto:frank_debenedetti@yahoo.com). The coordinates contained in the map will be added into the GolfTraxx database within a day or two so that they can then be downloaded directly to your PDA. If you do not find the course in our database, please email a scorecard, including the course address, zip code, and phone number. Also, if there is a course layout, feel free to attach that as well.

This primer assumes that the reader has already read the GolfTraxx Mapping Courses guide available at <http://pdazip.com/MappingCourses> and that the reader has already downloaded Google Earth. If not, point your browser to:

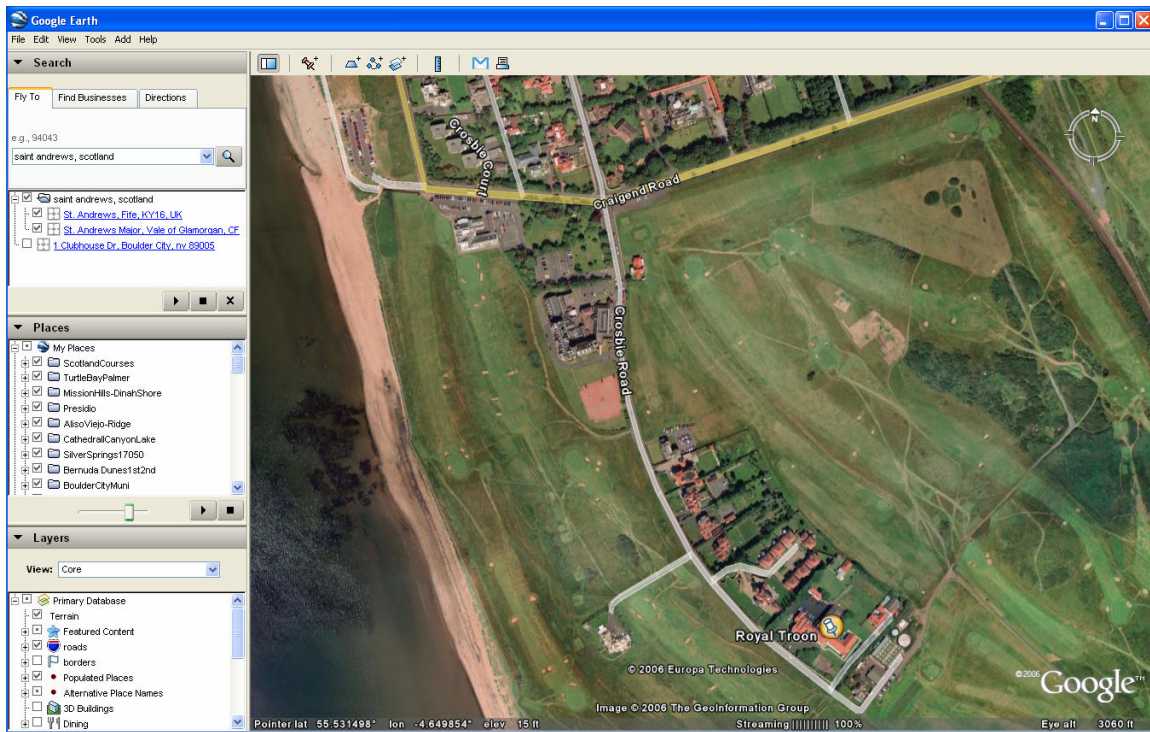
<http://download.earth.googlepages.com/>

The first step in mapping a course with “Extras” is simply to locate the golf course using Google Earth. If you have the physical address of the course available, the easiest method for locating the course is entering the address, city, state (e.g. 1 Clubhouse Drive, Anytown, Anystate) into the Google Earth search bar.

When searching abroad, you may have to simply start with the city/township and country (eg. Saint Andrews, Scotland) then do some navigating within Google Earth to find the course.

The first question to be answered once you have found the course is whether the Google Earth imagery is sufficient to map the course.

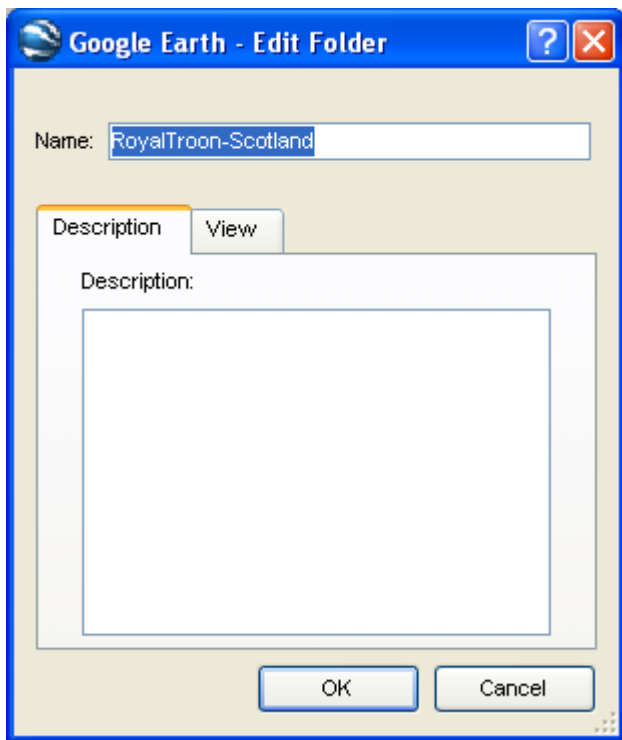
Below is a Google Earth map for Royal Troon in Scotland:



In order to decide whether the course is mapable, you need to determine whether when you zoom in using the (+) tool in the upper right corner of the screen, you can view the shape of the green clearly. For best results, you should be able to zoom in until the green is the size of an Eisenhower silver dollar (or larger) and still be able to clearly see the shape of the green.

If the course is mapable, then the next step is to add a folder in Google Earth. If not, just check back later on Google Earth as imagery is being updated all the time.

Right-click on MyPlaces then Add-Folder and enter the name of the course you are adding, plus the following text: ‘\_Extras’ (to differentiate folder from the course folder you already created) plus the zip or postal code then click OK.

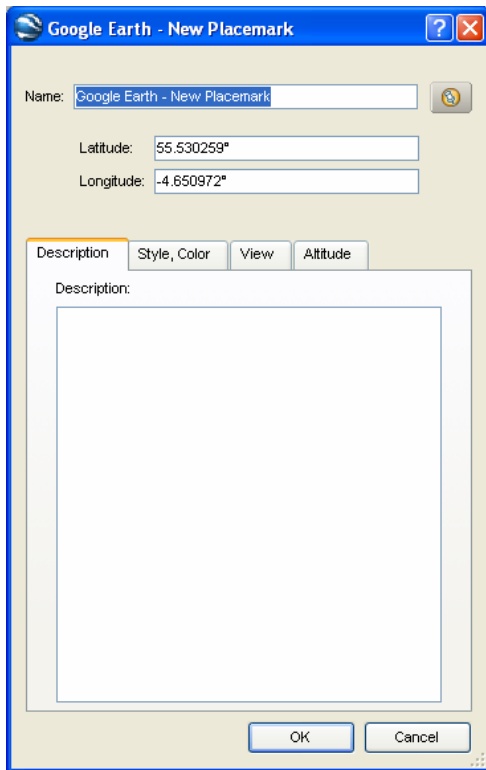


Next click on the folder you added. This will allow you to automatically store waypoints into this new separate folder (vs the folder you created when you mapped the course for front, middle, back, and tee targets).

Now, locate the first hole on the course and find the first “extra landmark” you would like to map. The imagery should remain such that the green is still at least the size of a silver dollar. If you are having trouble finding the first green, it is sometimes easier to find the clubhouse, then determine which holes go away from the clubhouse, then determine which of the holes that go away from the clubhouse is #1.

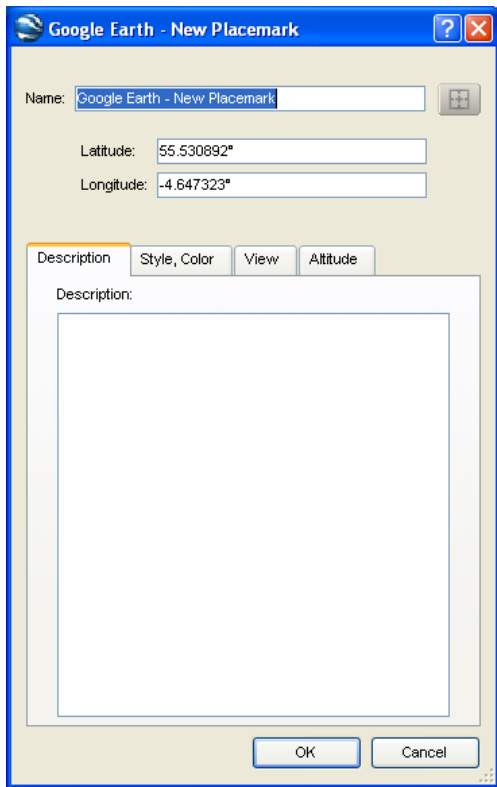
What the GolfTraxx application does is provide an **Other Targets** or **Landmarks** button on the Play Golf screen. When you click it, it takes you to a new screen which shows the landmarks that have been set up for the hole in a dropdown. By clicking on a landmark in the dropdown, GolfTraxx provides (displays and speaks) distances to reach and to carry the landmark.

So now, we simply add the desired waypoint. To do this, click Add-Placemark.

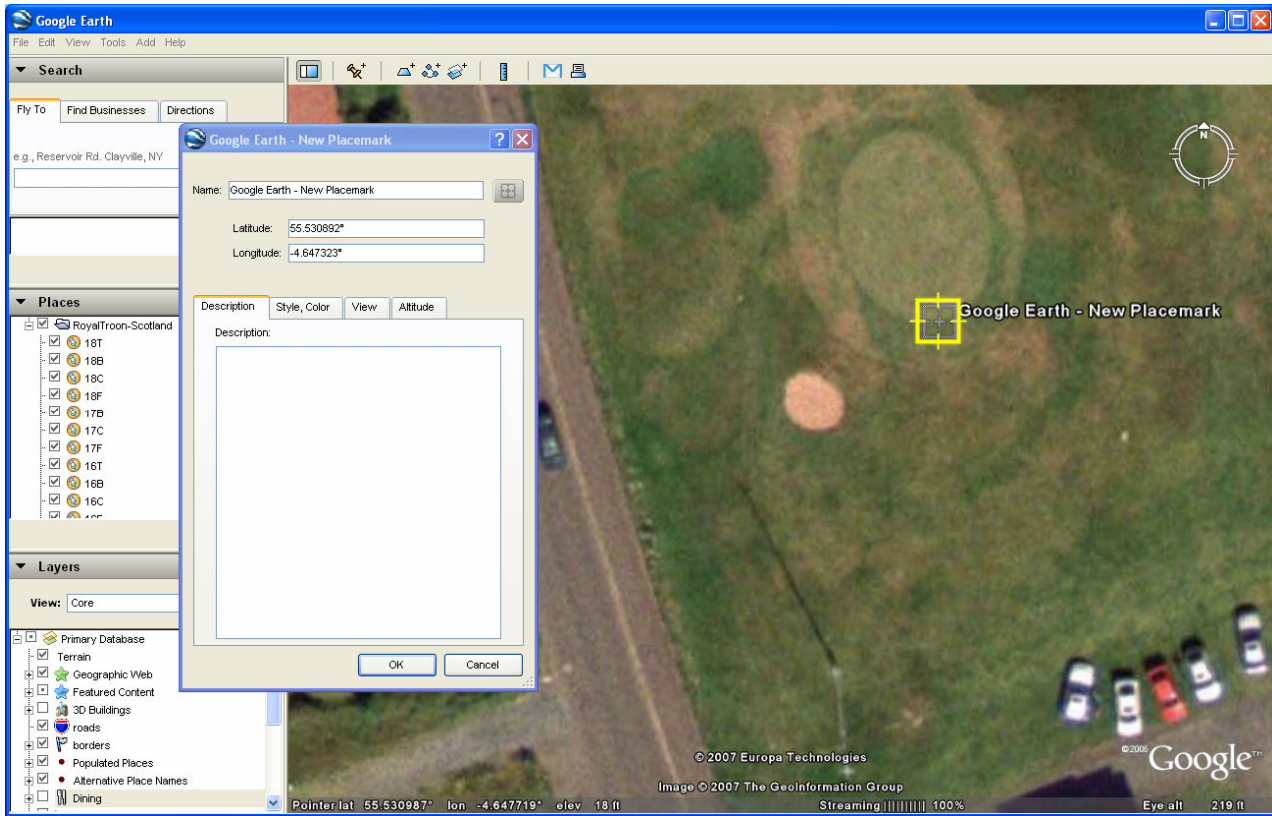


Position the placemark image over the landmark you want to add. The more exact you are in the placement of the waypoints, the better your yardages will be. Please note that newer versions of Google Earth are defaulting to waypoint markers that are not the most helpful for mapping. You can change what the default marker is used is.

We recommend that you use the marker that allows you to see the imagery through the crosshairs of the placemark marker. To the right of the Name field in the Add Placemark dialog box, there is an image that indicates what your placemark image is. When you click on this image, you are given the opportunity to change which image is used. Select the marker that you like the best for mapping purposes. We recommend the crosshairs shown below.



Notice in the following image how the crosshairs of the placemark can be centered right over the edge of the green. This removes a lot of the guess work from placemark positioning.



Now, name the way point, using the following format.

Hole #	code
1	01
2	02
3	03
4	04
5	05
6	06
7	07
8	08
9	09
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18

Next, provide a description of the landmark in the name (with no spaces such as Fairway Bunker or Lake)

Next specify the location of the landmark on the hole (Right, Left, Center)

Finally, specify whether the landmark point in “to reach” or “to carry” position.

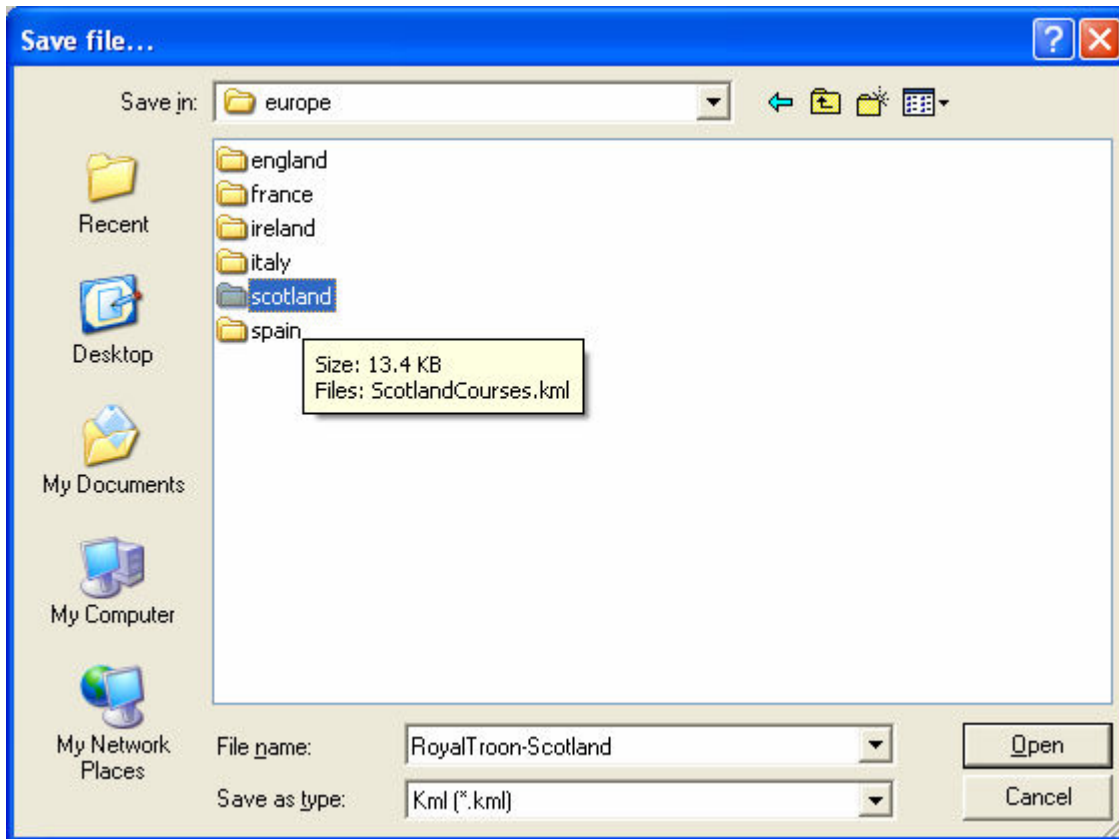
Here’s an example: 01FairwayBunkerRightREACH

So the landmark marking the “reach” position of the Fairway Bunker on the left of Hole #1 is named as 01FairwayBunkerLeftREACH and the carry position is named as 01FairwayBunkerLeftCARRY.

Proceed to map the additional remaining landmarks on this hole. That’s it, you have just mapped the first hole of your course.

Proceed to map the remaining holes where landmarks are desired using the same methodology on the course. Be sure to map a tee target for each hole except par 3’s. As a basic rule, we use the following strategy for determining tee target distances (from the center of the green). You can also map specific distances to center of greens if desired

Once the course has been completely mapped, the final step is simply to right click on the folder you created in step one, then click save as:



Make sure that the .kml extension is specified and that you add the word \_extras to differentiate it from the course file.

Now, email just us the kml file.

Benefits of mapping courses using Google Earth:

1. Mapping the course using Google Earth is far more accurate than using your PDA device.
2. Mapping your course(s) using Google Earth is much faster than using your PDA to map the course.
3. Mapping your course using Google Earth means that each coordinate is verifiable, unlike any of GolfTraxx' competitors.
4. Once added to the GolfTraxx database, courses can be downloaded for free at any time.
5. In case you ever need to reinstall the application on the PDA device, you will not have to re-enter course information.
6. Ensure that the low price leader for GPS technology for golf can stay that way.