

How to digitize site (counting unit) boundaries for the International Waterbird Census sites

Background

Drawing site boundaries is an important and easy way to standardise site coverage and help counters monitor the correct area and route. It allows better understanding of site coverage between years, especially if others are involved in the counting.

Ideally, to enable use this count information for monitoring of the wetlands and contributing to their management, especially of protected areas, it is useful for your counts to cover the entire area of the wetland within the protected area. If it is a large area, you can divide this into sub-sites which you will normally count at one visit (see below).

Digitising site boundaries allows this information to be shared quickly and easy. This document provides step-by-step guidance to digitising boundaries in the easily available freeware Google Earth and in the online Google Maps.

Google Maps is less demanding on your computer, but you will need to have internet access and register a gmail account to use the service.

It is also possible to digitise boundaries through special GIS programmes like ArcGIS, but further guidance on the methods are not included in this manual. Please send a copy of the boundaries to awc@wetlands.org.

Existing IWC sites and names

In case you are digitising sites that are already in the IWC database, it is important to add the name of the site as it is in the IWC database. National coordinators can ask for this list with IWC names from awc@wetlands.org.

Subsites

For large sized sites with well-known and clearly demarcated sub-sites, it is useful to submit a form for each sub-site which you will normally count at one visit (or on a day). It is important to be able to identify the name of the sub-site clearly, for e.g. Chilika Lake--Mangalajodi; Chilika Lake--Nalabana, are two separate sub-sites within the Chilika Lake.

Secondly it will be important that a combination of new made counting units together overlaps precisely with the older bigger sites in the IWC database.

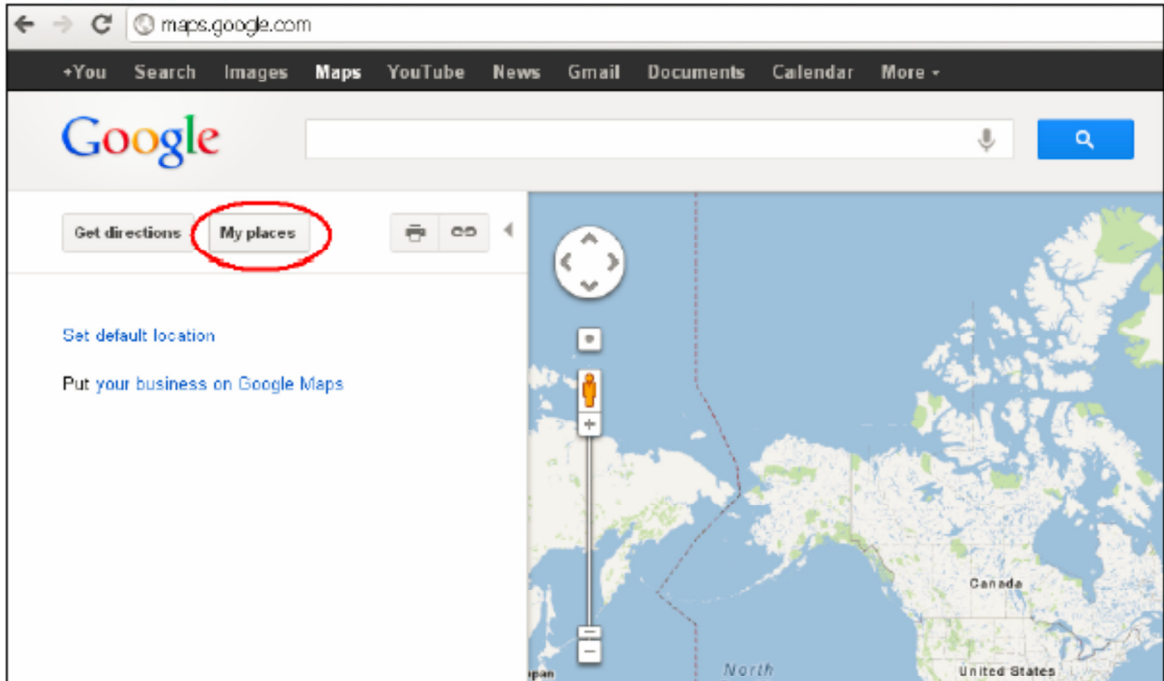
Note, these boundaries reflect the area you are actually covering during the counts. Therefore this boundary may be different to that of a protected area or Ramsar site within which you are counting.

If you have any questions, kindly contact awc@wetlands.org

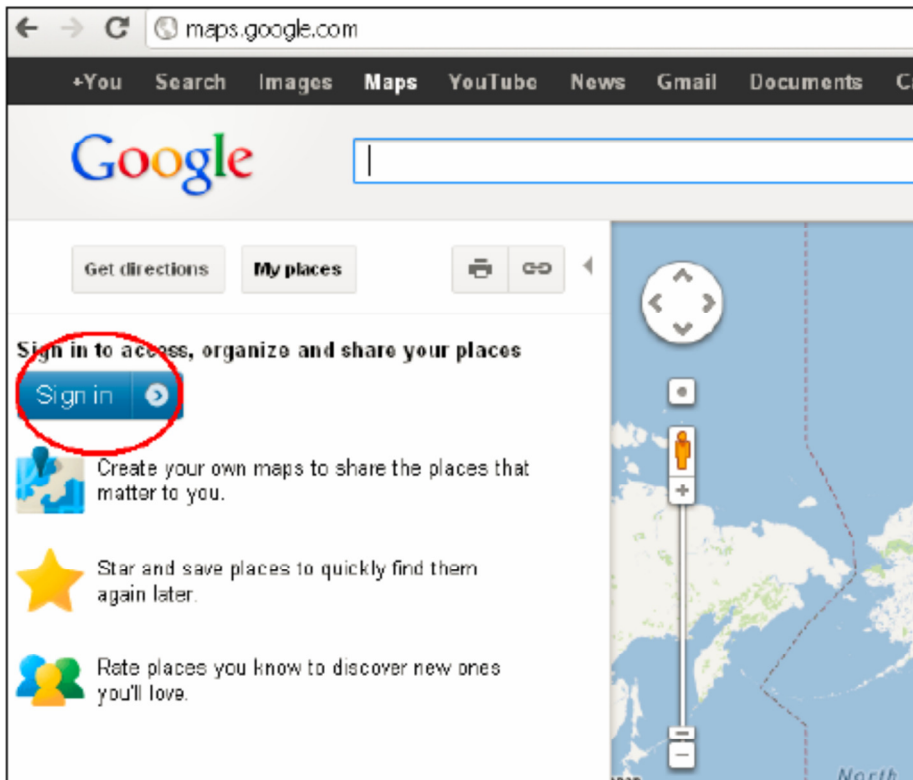
Using Google Maps

To work in Google Maps, go to www.maps.google.com/maps.

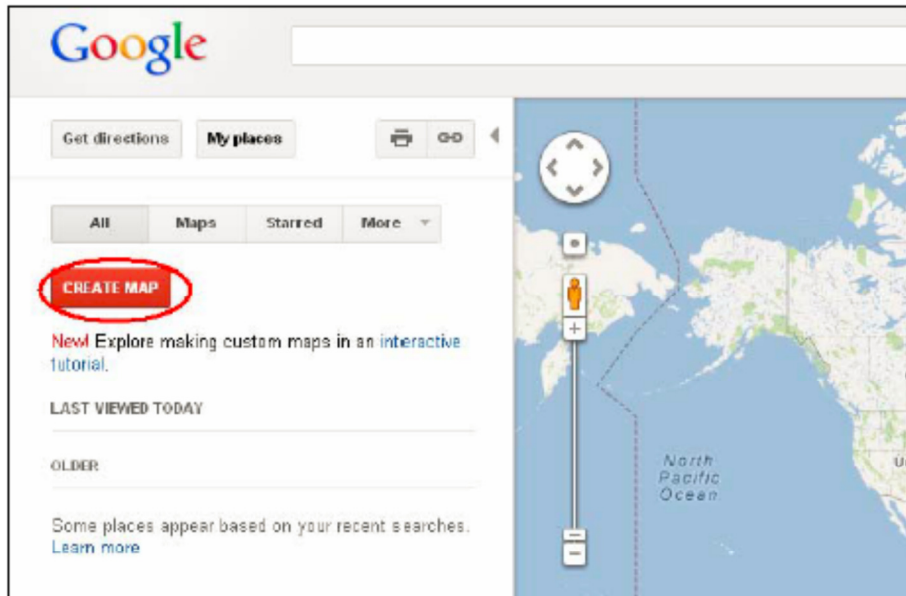
1. Once in the Google Maps screen, click on the "My Places" button in the left-hand menu.



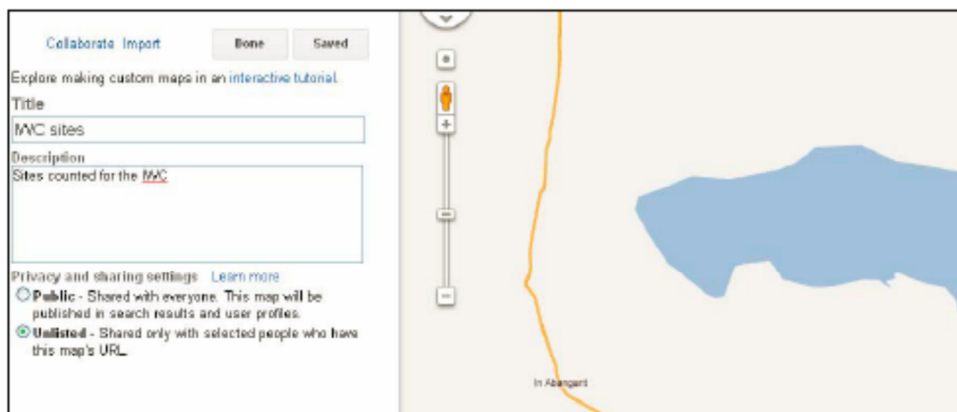
2. You will need to sign in or register by clicking on the Sign in button.



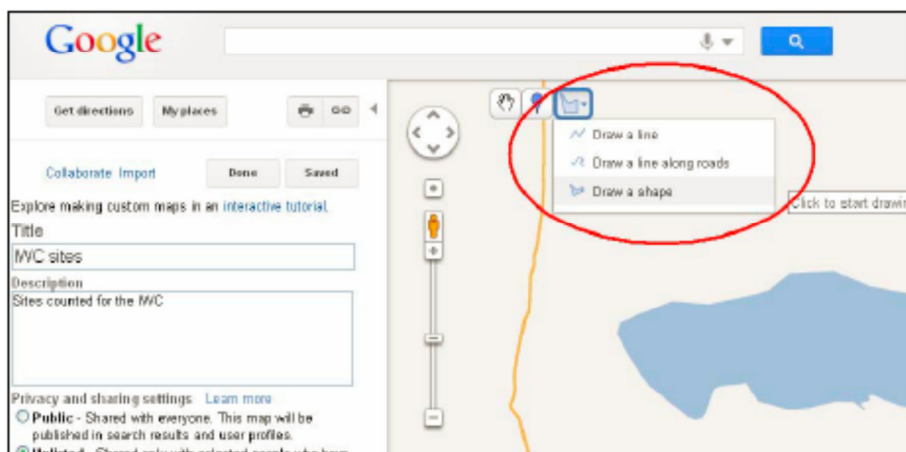
3. Once signed in, click on the button create map.



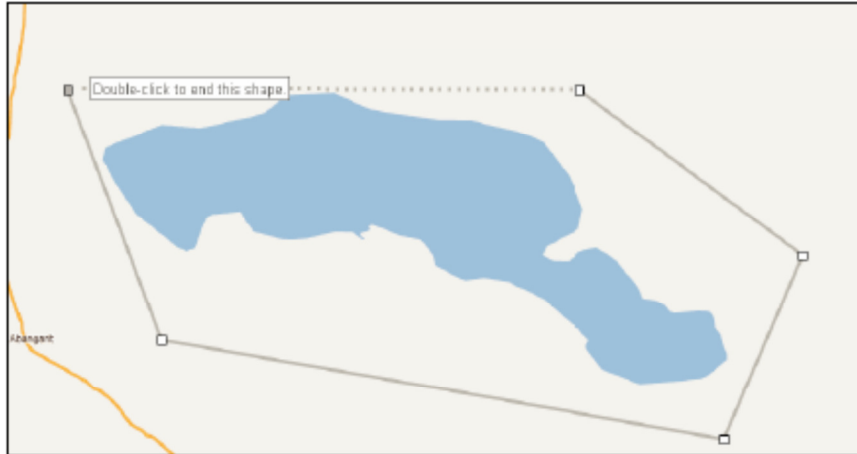
4. Give a title and description to the map and choose if you want the map to be publicly available or not.



5. Zoom into the area of your site and select the "Draw a shape" option from the drawing drop down list



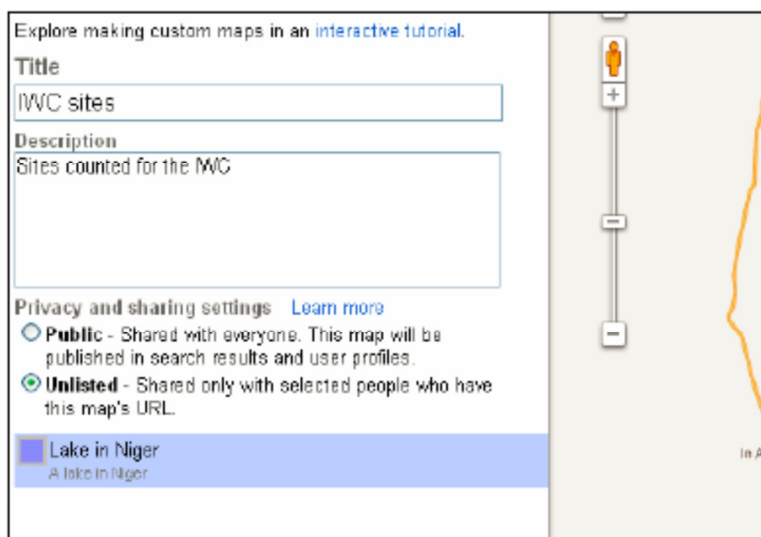
- Click the left mouse button to mark a point around your site. Once you've finished drawing points, double click on the first point to finish your site boundary.



- Provide a title and a description of your site. You can edit the colour of the site by clicking on the coloured square in the top right of the pop-up window.



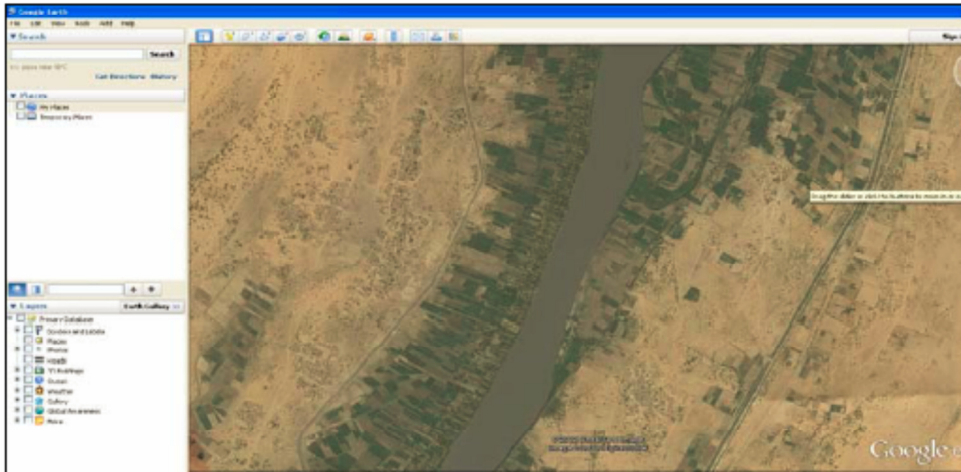
- The site will now be listed in the left hand menu of your screen




USING GOOGLE EARTH

To obtain the latest version of Google Earth just go to www.google.com, search for "Google Earth" and follow the links to download the programme.

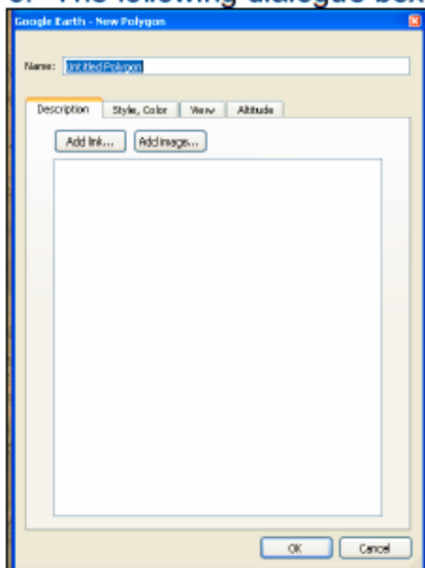
1. Once Google Earth is installed, run the programme and zoom in to the area of the site



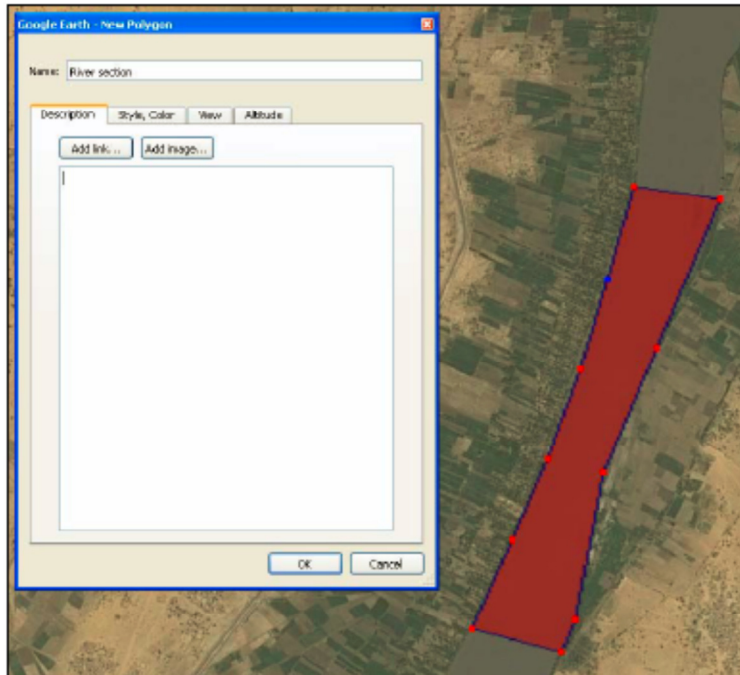
2. You have 3 options to open the new polygon dialogue box. Either:

- a. Click on the  icon
- b. Press ctrl+shift+G
- c. Go to Add > Polygon

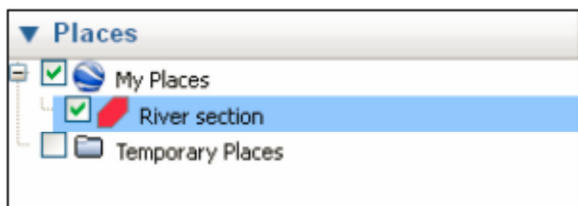
3. The following dialogue box opens:



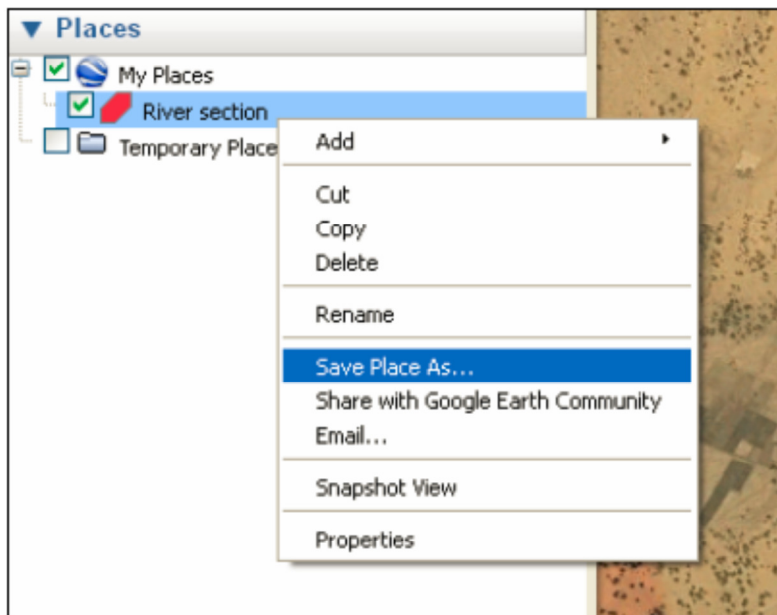
4. Fill in the site name in the box "Name" and add a description if you wish. You can also choose the colours of the polygon and outline under the "Style, Colour" tab. You can also set the level of transparency under this tab. **DO NOT PRESS OK YET!**
5. A square cursor will appear when you hover the mouse over the map. Click around the outline of your site to add points.



6. When you are happy with the polygon, click OK. The polygon you made will now appear in the left panel



7. To save the polygon to a file on your computer, left click on the polygon name. Choose "Save Place As..." in the menu that appears and then navigate to the folder you want to save the polygon in. The polygon can be saved as a KMZ or a KML. A KMZ is a zipped version of a KML. Enter the name you wish to use for the KMZ/KML and click save.



You can share this file with anyone who has Google Earth and they can open it on their computer.

To open, simply click on the kmz or kml file, and the Google Earth programme automatically opens with the shape file in the correct place.