### How to digitize site (counting unit) boundaries

Drawing site boundaries is an easy way to standardise site coverage and help counters monitor the correct area and route. 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 as well as the online IWC Observado platform and online IWC database system. We recommend using Google Earth only with high performance computers, as it is likely to crash older and slower machines. 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. If you have existing digitised site boundaries and wish to add them to your country's Observado platform or the IWC online database, please send a copy of the boundaries to <a href="iwc@wetlands.org">iwc@wetlands.org</a>.

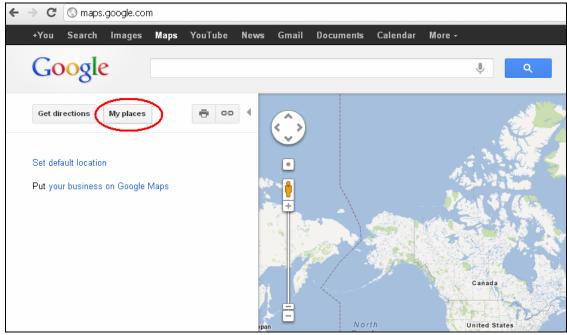
#### **Existing IWC sites**

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 and add the international IWC code between brackets. The international IWC code consists of the two letters ISO code of the country and four digits. National coordinators can ask for this list with IWC names and codes from <a href="www.ewetlands.org">www.ewetlands.org</a>. In case you are defining a new site that is related to an existing IWC site (e.g. a smaller count unit within an older IWC site), it is important to indicate in the name its relation with the site and sometimes even subsite or monitoring unit. For instance the name - Banc d'Arguin, Baie d'Aouatif, Zira – is the name for the counting unit Zira (a small island) in the subsite Baie d' Aouatif at the site Banc d' Arguin. 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.

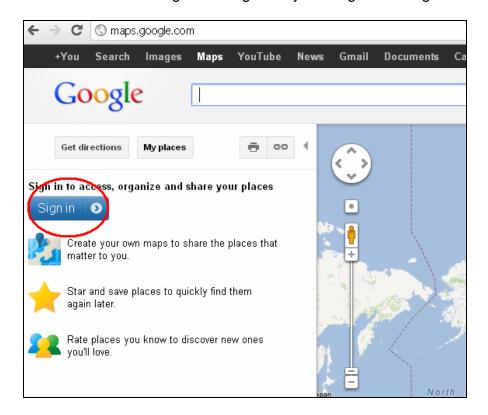
# Using Google Maps

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

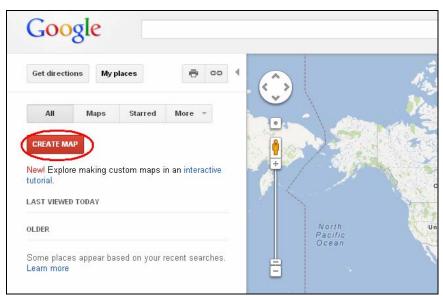
1. Once in the Google Maps screen, click on the "My Places" button in the left-hand menu.



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



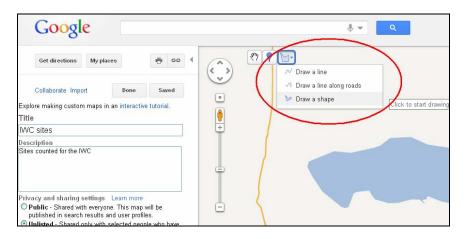
3. Once signed in, click on the button create map.



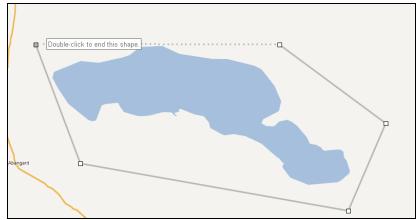
4. Give a title and description to the map and choose if you want the map to be publicly available or not.



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



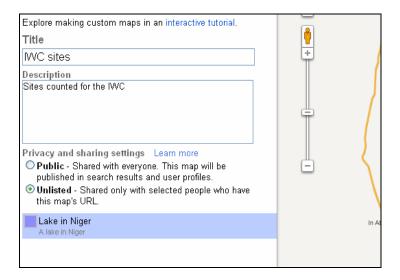
6. Click the left mouse button to mark a point around your site. Once you've finished drawing points, double click on the first point to finish your site boundary.



 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.



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



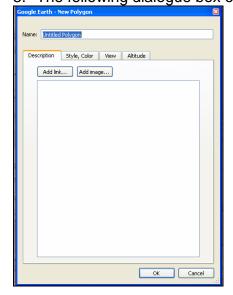
# Using Google Maps

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

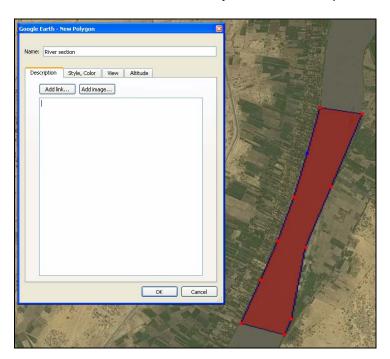
1. Once Google Earth is installed, run the programme and zoom in to the area of the site



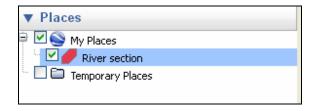
- 2. You have 3 options to open the new polygon dialogue box. Either:
  - a. Click on the icon
  - b. Press crtl+shift+G
  - c. Go to Add > Polygon
- 3. The following dialogue box opens:



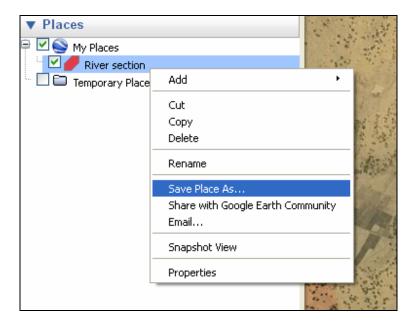
- 4. Fill in the site name in the box "Name" and add a description if you wish. You can also choose the colours of the polygon and outline under the "Style, Colour" tab. You can also set the level of transparency under this tab. **DO NOT PRESS OK YET!**
- 5. A square cursor will appear when you hover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

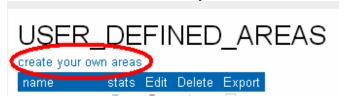
#### Using Observado

The IWC Observado platform includes a built-in function to digitise site boundaries. To use this function, the IWC Observado platform must be available for your country. A national coordinator can create an IWC Observado platform for their country by contacting a Wetlands international Administrator and an Observado administrator. Please note that you will first need to register with Observado.org. Additionally, the mapping function of Observado is not compatible with some versions of Internet Explorer. We advise you use an alternative browser for optimum performance.

1. After signing into the Observado platform for your country, navigate to the "My Areas" page under the "My observado.org"



2. Click on the text "create your own areas".



3. On the map in new page, zoom into the area of your site using your mouse scroll wheel or the + - buttons on the map screen. You can move to a different area in the map by using the cursor keys on clicking and holding on the map and dragging your mouse.



4. Select whether you prefer a satellite image on the map or a cartographic style map.

Map Satellite

5. Use the polygon icon to enter the drawing mode.



6. Create the starting point of your boundary by clicking on the map. Click on the map to continue defining your site boundary. If you put a marker in the wrong place, you can move it by clicking with the mouse and dragging to the correct location. You can also delete a marker by right clicking on it. Double click when creating the last marker to complete your site

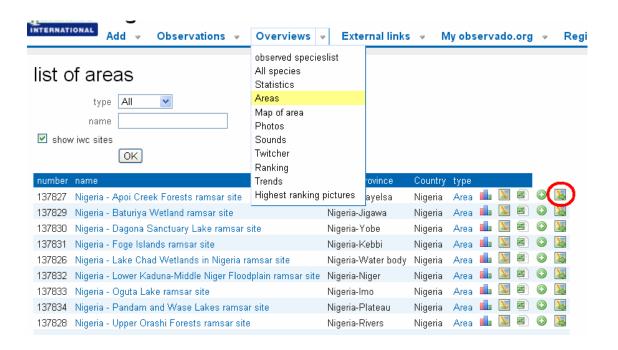
boundary.



7. Enter the name of the site in the text box "naam"

naam Lake section 1

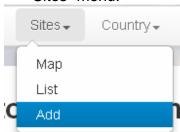
- 8. Click on "OK" under the map to save your new site.
- 9. To add your site to the list of IWC sites for your country, you will need to contact an Observado administrator. Once your site has been added to the list, you can go to "Areas" in the "Overviews" menu and download your site to a kml by clicking on the icon.



#### Using the online IWC database

The online IWC database is designed for IWC national coordinators to manage their country's IWC count information and includes a module to digitise new site boundaries. National Coordinators should already have an account for the system. If not, please contact a Wetlands International Administrator.

1. Once you are logged in to the system, go to the "Add" page under the "Sites" menu.



2. You can zoom into the area of your site on the map by using the scroll button on your mouse or the +- icons on the map.



3. Click Use the polygon icon to enter the drawing mode.



4. Create the starting point of your boundary by clicking on the map. Click on the map to continue defining your site boundary. Double click when creating the last marker to complete your site boundary.



5. Add the site name and, if applicable, parent site name in the provided text box.



6. Click on "Add" at the button of the screen to add your new site.

