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

Background

The Asian Waterbird Census (AWC) is an international programme that focuses on monitoring the status of waterbirds and wetlands. It also aims to increase public awareness on issues related to wetland and waterbird conservation. The census is carried out each January as a voluntary activity at national and local level. The AWC is co-ordinated by Wetlands International as part of global programme, the "International Waterbird Census". Further information on the AWC is available on www.wetlands.org/awc

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.

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 online Google Maps and in the easily available freeware Google Earth.

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 your AWC National Coordinator and 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.

Parent Sites and Subsites

For large sized sites (parent 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 and Chilika Lake--Nalabana, are two separate sub-sites within the Chilika Lake.

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

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

Using Google My Maps

1. On your computer, sign in to My Maps <https://www.google.com/maps/d/> Sign in will require you to have a Google (or Gmail) account.
2. Open or create a map.
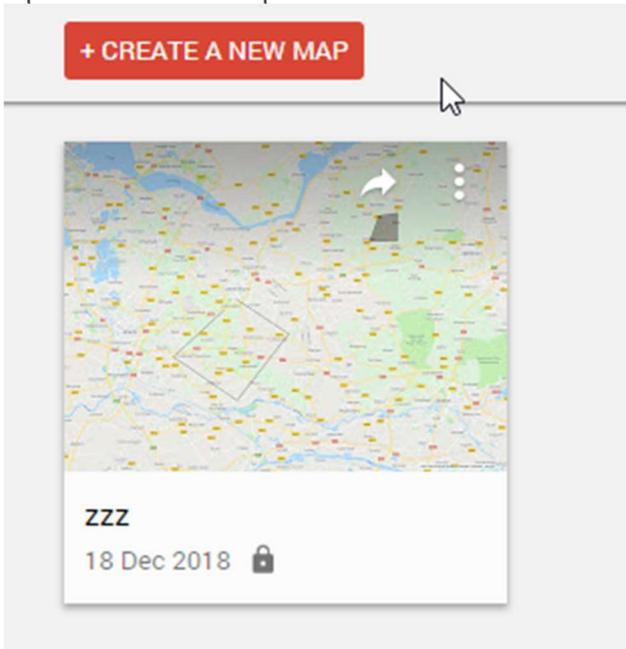
3. Click Draw a line ⬡ ❯ Add line or shape.
4. Select a layer and click where to start drawing.
5. Click each corner or bend of your shape. To move the map, click and hold the mouse.
6. When you're finished drawing, double-click or complete the shape.
7. Give your shape a name.
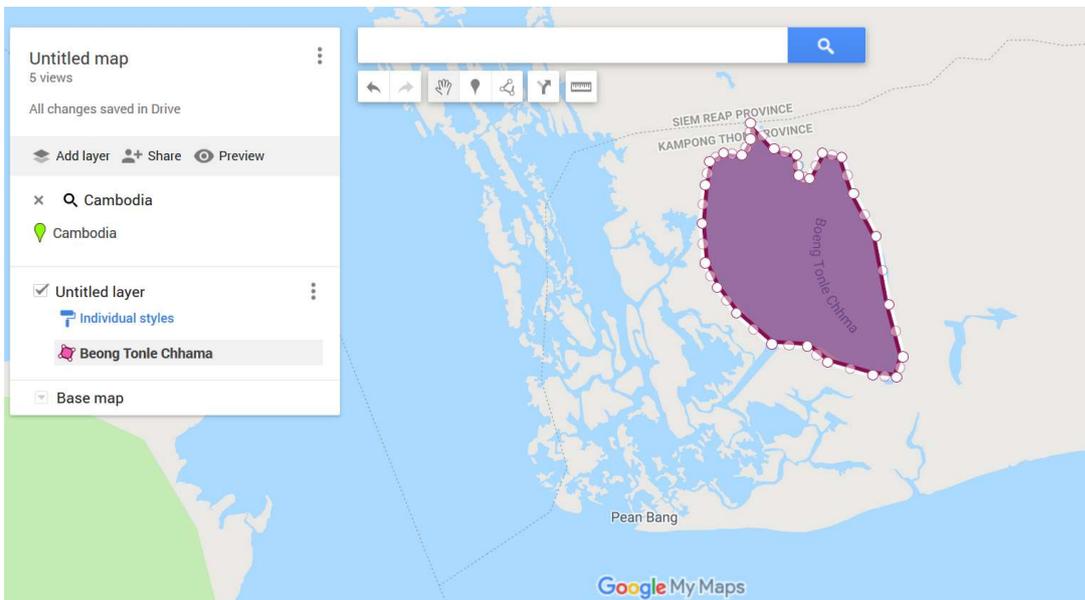
8. When you're done, click Save. In the left panel, click Menu ⋮ ❯ Export to KML/KMZ choose layer to download then selecting box Export to a .KML file. Press Download and Save File.

USING GOOGLE EARTH PRO

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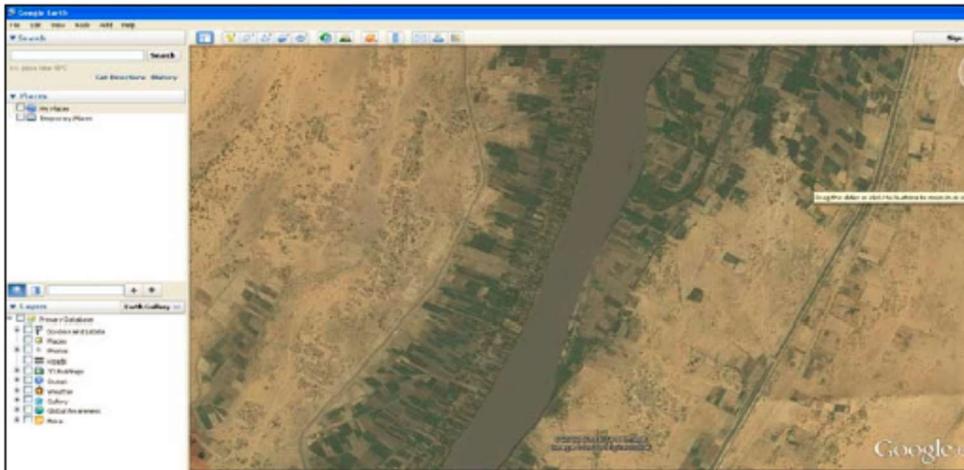
2. You have 3 options to open the new polygon dialogue box. Either:
   a. Click on the ⬭⁺ icon
   b. Press crtl+shift+G
   c. Go to Add > Polygon

3. The following dialogue box opens:
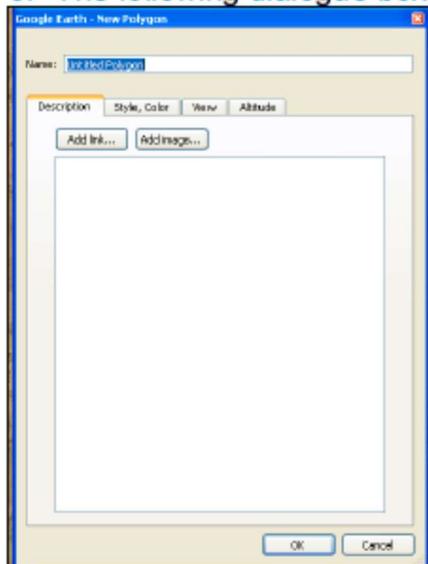
4. Fill in the site name in the box "Name" and add a description if you wish. You can also choose the **colours** of the polygon and outline under the "Style, Colour" tab. You can also set the level of transparency under this tab. **DO NOT PRESS OK YET**!

5. A square cursor will appear when you hover the mouse over the map. Click around the outline of your site to add points.
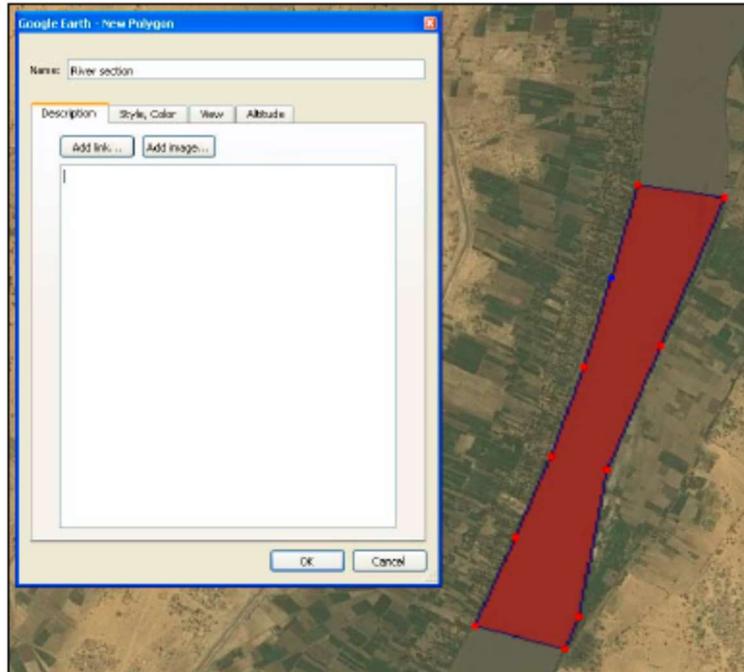
6. When you are happy with the polygon, click OK. The polygon you made will now appear in the left panel
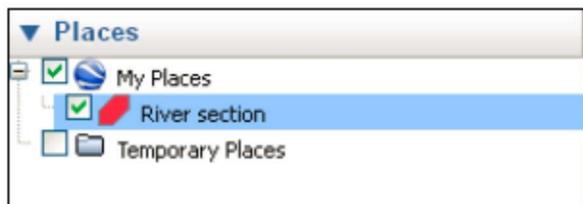
7. To save the polygon to a file on your computer, left click on the polygon name. Choose "Save Place As…" in the menu that appears and then navigate to the folder you want to save the polygon in. The polygon can be saved as a KMZ or a KML. A KMZ is a zipped version of a KML. Enter the name you wish to use for the KMZ/KML and click save.
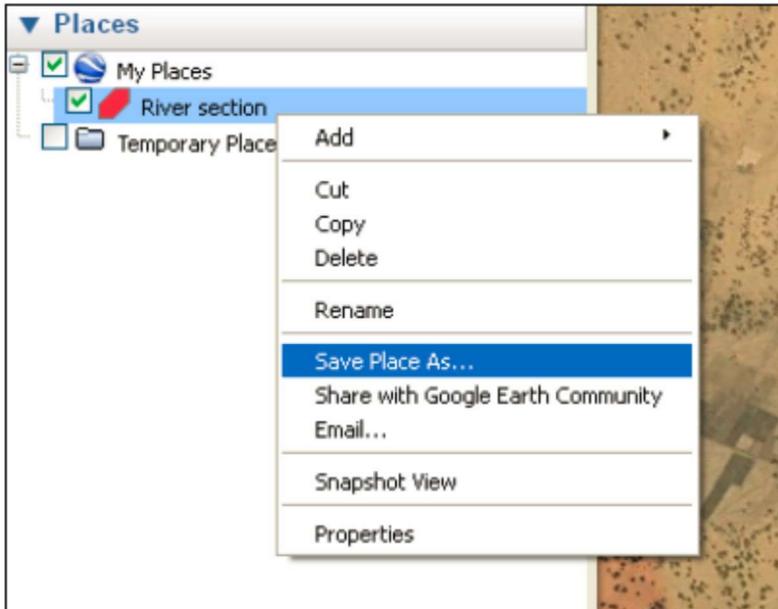
You can share this file with anyone who has Google Earth and they can open it on their computer.

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.