



## “GIS FOR PERMITTED AND UNPERMITTED AREAS OF HUNTING” PROJECT

**Name of Corporation :** Republic of Turkey, Ministry Environment and Forestry, IT Department, Directorate of Nature Conservation and National Parks General Directorate of Game Wildlife

**State of Project :** Resuming



**Application Link :** <http://mak.cevreorman.gov.tr/>

### **The Scope and Objective of the Project:**

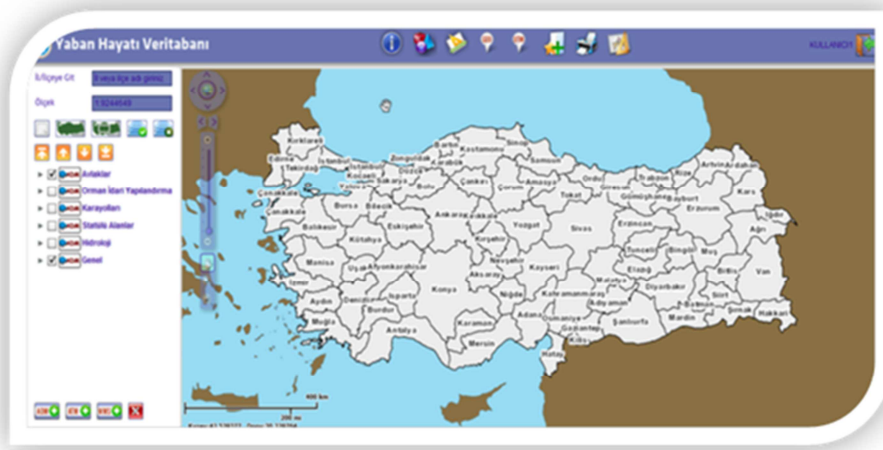
Within the project, it is aimed to develop a GIS application that contains a web-based analysis and management system in line with the requirements. Map of Permitted and Unpermitted Areas for Hunting has been produced and published every year by Central Hunting Commission and city/state hunting commissions in order to put the hunting in an order, preserving and developing the game and wildlife.

It is aimed to produce a GIS supported web application that allows tracking the hunting education, tracking the hunting certificate, querying the hunting offenses, presenting and managing of geographical locations, quota and sort informations of hunting grounds that registered or will be registered in hunting season by Department of Game and Wildlife, relevant departments of provincial directorates and hunters. With this new application, it is objected overcoming the deficiencies of current wildlife database and according with new system.

An extension has been developed in Esri ArcMap 9.3.1. Software in order to creating the aforesaid maps as web-based map supported on the basis of city, presenting these maps online, annual update with these bases and managing the current geographic information system in computer environment.

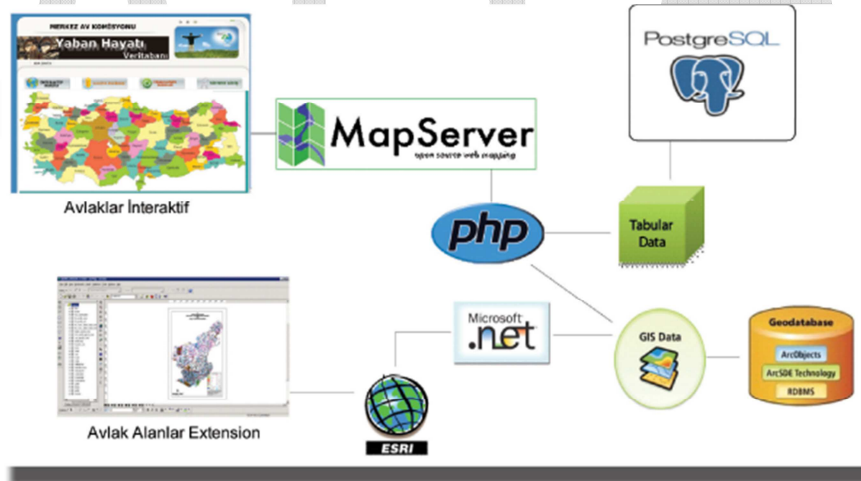
Within the GIS for Permitted And Unpermitted Areas Of Hunting Project, every provinces could input their relevant datas about hunting grounds.





This application provides analysing the current datas, occuring the database structure and GIS interfaces, digitizing of hunting grounds and unpermitted areas, defining the map properties, putting in an order, querying, managing and integration with “National Parks Database”. Personnel of Directorate of Nature Conservation and National Parks could use the software and create the permitted and unpermitted hunting areas sensitively and publish them by using current bases.

General Directorates and Provincial Directorates could input data as administrator and confirm the projects in computer environment. By using extension, results could be reported and maps could be printed automatically.

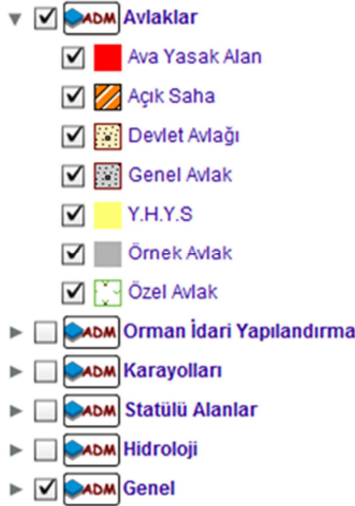


### WILDLIFE DATABASE GIS APPLICATION

This application contains basic 3 roles. These roles are user, centre and manager roles. User role; Personnel of Provincial Directorate of Environment And Forestry could use the software and create the permitted and unpermitted hunting areas sensitively and publish them by using current web based, spatial databases and GIS interfaces. Center role; controlling and confirming of the permitted and unpermitted hunting areas that have been input by users. Manager role; managing of relevant

application. With another words, the person who manage the authorisation of system. Manager has authorisation in order to develop and confirm the digitized permitted and unpermitted hunting areas which had been input by users.

It is possible to reach to application by using <http://mak.cevreorman.gov.tr/> link, "Enter to System" tab by entering "User Name" and "Password" informations.



It is possible to view hunting area types at the left side of the application under the title of "Avlaklar". The other layers are relevant layers within the Ministry of of Environment And Forestry that users could use as reference.

Web-based map application contains tools that provide users occurring, displaying and managing the hunting areas, that takes place in database, on different bases.



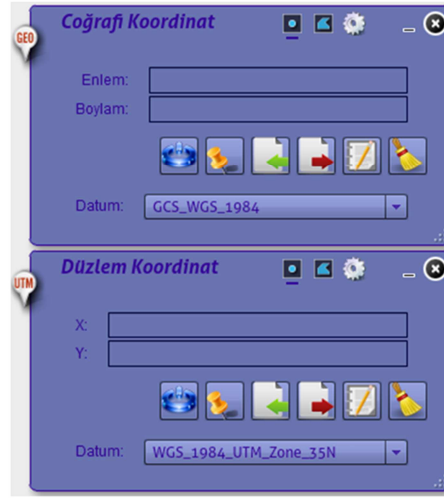
It is possible to list the tools as; defining the details, creating symbols, measurement, occurring and saving the bitmap and areal based geographic and planar (UTM) coordinates, adding bookmark, printing and hunting ground editor tools.



Defining tool provides querying the layers in the form of text or spatial. It is possible to query the details on map by using point or polygon and it is possible to view attributes.



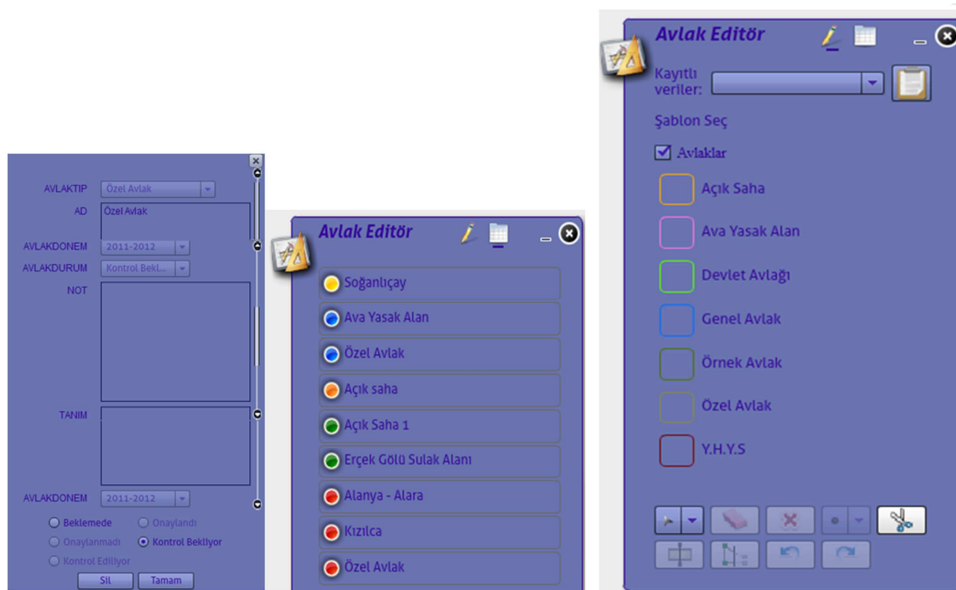
It is also possible to plot points or polygons on maps and zoom to input coordinate.



Point and polygons could be created by inputting both geographic and planar (UTM) coordinates. These coordinates could be saved in a text file and copy on a screen or a coordinate file could be integrated in system.

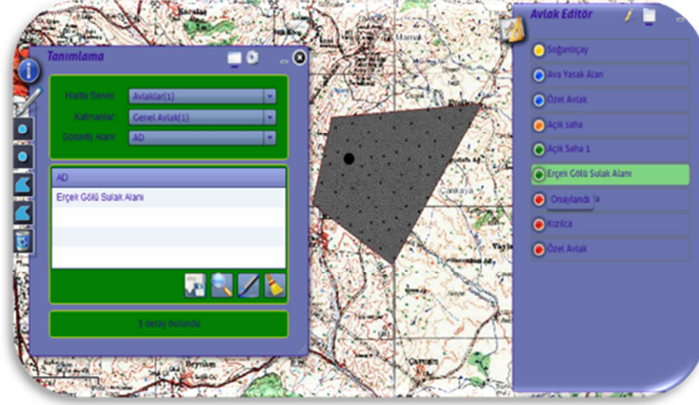
### HUNTING GROUND EDITOR

“Avlak Editor” is the tool that provides occurring new layers and managing the current layers. With this tool, it is possible to select the types and situations of layers, enter the names, add notes and definitions. Also, it is possible to add the cases named “(sleep mode)”, “(checked)”, “(not checked)”, “(waiting for checking)”, “(checking)”. All cases have their own colour and it is possible to list the details and view from attribute table.



It is possible drawing in “Avlak Editor” by selecting “Şablon Seç” section and detail type. Also, tool provides to undo, redo, delete, recreate, cut, and edit from vertex points processes.

The map, which completed and confirmed by administrator, could be displayed in the manner that relevant layers have their symbology. Also, it is possible to reach the attribute informations of details when query for detail.



“Harita Servis” section should select in order to query and after select “Katmanlar” section and it is possible to take information from “Görüntü Alanı” section by selecting releant area.