Alaska Large Fire History Database:
Where to Find it and How to Download it

The Alaska Large Fire History Database, containing current and historical fire and lightning information, is available for download. The fire history (point of origin and perimeter) database has undergone many changes—especially in the 2007- 2009 seasons, when state wide fire records from 1939 to 1949, a fire origin 'Locations Since 1939' layer, and over 200 additional old perimeters were added. It is highly recommended that users download the latest version of the database. Active fires and lightning data are updated daily throughout the fire season. Note: although there is "Fire Perimeter Shape File Download" item on the main Maps/ Imagery menu, this will only give you the current year's fire perimeters in a shape file!

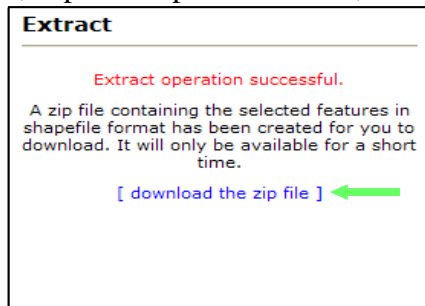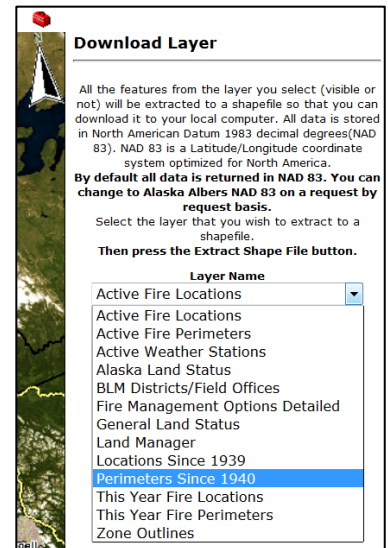## How to download the Alaska Large Fire History Database from AICC:

Step 1. Navigate your web browser to the Alaska Interagency Coordination Center (AICC) web site: http:/ / fire.ak.blm.gov/   Select the "**Maps/Imagery/Geospatial**" link on the left hand side then click on "**Fire History**."

From this point there are three primary options to download/ manipulate the data including downloading the entire database, performing selections before downloading, and manipulating the data within the ArcIMS site:

Option 1: Downloading the Entire Fire History Database

1. It's easy to download the entire database: click on 'Popular Downloads' in the top red menu bar for a Download Layer list.

2. In the "Layer Name" drop down box, select either Locations since 1939 or Perimeters since 1940 layer and click "Extract Shape file."

3. Click "download the zip file".
4. For the complete database, repeat steps 2- 3 above, this

Download Layer

All the features from the layer you select (visible or not) will be extracted to a shapefile so that you can download it to your local computer. All data is stored in North American Datum 1983 decimal degrees(NAD 83). NAD 83 is a Latitude/Longitude coordinate system optimized for North America.
By default all data is returned in NAD 83. You can change to Alaska Albers NAD 83 on a request by request basis.
Select the layer that you wish to extract to a shapefile.
Then press the Extract Shape File button.

Layer Name
Active Fire Locations
Active Fire Locations
Active Fire Perimeters
Active Weather Stations
Alaska Land Status
BLM Districts/Field Offices
Fire Management Options Detailed
General Land Status
Land Manager
Locations Since 1939
Perimeters Since 1940
This Year Fire Locations
This Year Fire Perimeters
Zone Outlines

Extract

Extract operation successful.

A zip file containing the selected features in shapefile format has been created for you to download. It will only be available for a short time.
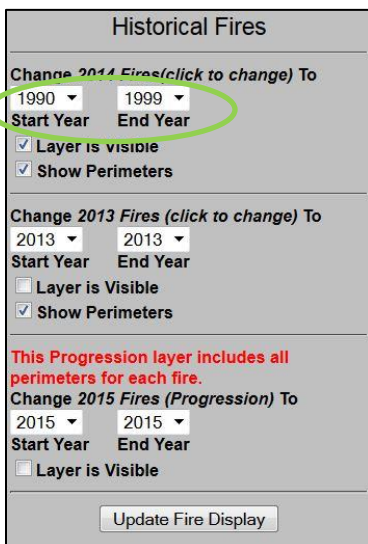
[download the zip file]

time selecting whichever layer (Locations or Perimeters) not selected for the first extract.

5. Once the shapefiles have been unzipped and saved to your computer, they can be added as layers to your ArcMap document.

Option 2: Performing Selections Before Downloading

There are several ways selections can be performed to eliminate unwanted data. Below are just a few examples. Creating these selections may take some prior knowledge of the tools and functions available on the ArcIMS site. Links to both "***Tool and Button Help***" and "*GIS Tutorial*" can be found in blue above the main tool bar.

Hide Map Layers Feedback

Fire History
☑ ❶ 2014 Fires(click to change)
Fire Locations 1
Fire Perimeters 1
☐ ❶ 2013 Fires (click to change)
☐ ❶ 2015 Fires (Progression)

Historical Fires

Change *2014 Fires(click to change)* To
1990 ▼ 1999 ▼
Start Year End Year
☑ Layer is visible
☑ Show Perimeters

Change *2013 Fires (click to change)* To
2013 ▼ 2013 ▼
Start Year End Year
☐ Layer is Visible
☑ Show Perimeters

This Progression layer includes all perimeters for each fire.
Change *2015 Fires (Progression)* To
2015 ▼ 2015 ▼
Start Year End Year
☐ Layer is Visible

Update Fire Display

Selecting Ranges of Years:

1. Click on the top *current year* Fires layer shown in red to change the years displayed to your desired range.

2. For example, if interested in fires from 1990 to 1999, select the appropriate years in the drop down boxes. Check the box (if not already checked) to make sure the layer is visible and click "Update Fire Display".

3. To select only a single year, set the start year and end year to the year of interest. To select groups of ranges, for example 1990 to 1999 and 1960 to 1969, repeat step 2 in the second

<year> Fires box. Make sure the "Layer is Visible" box is checked for both groups of years and click "Update Fire Display".

4. As you can see, another option is to download not only the final perimeter but all progression perimeters for fires (this is sometimes used in reviewing fire modeling performance).

5. The map will update with your selected layer(s) and the database can be extracted at this point by clicking the "Extract Shapefile" button in the red menu bar at the top. You will have a choice of NAD 83 or Alaska Albers NAD 83 datum and the data is loaded into a zip file for you to download. If you do not need the entire state, see below on selecting additional attributes/ geographic areas.

Tip: You can only download 1 layer at a time. If you are looking at 2 year ranges (e.g., 2000-2009 and 1970-1979), you must select which layer you want to extract first AND if you want the "Fire Locations" or the "Perimeters". So if you wanted points & perimeters for both ranges of years, you will end up having to extract 4 shapefiles.

Selecting Fire Locations and Perimeters by Other Attributes or Geographic Areas:

Fires can be selected by years as described above or by other attributes (ownership, size, etc.) from the entire database or after the desired years have been selected.

1. First adjust the desired Fire History Layer range of year in the Map Layers window and check them "visible".

2. Click "Select" in the top red toolbar. There are 7 different selection methods to choose from:
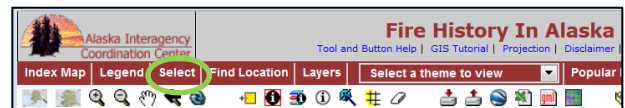
- Select by Point, Box, Polygon, Attribute, Set or Layer, or
- Select using Query Builder

An example of selecting fire history data for a rectangular area (red box) on the North Slope would look like this:
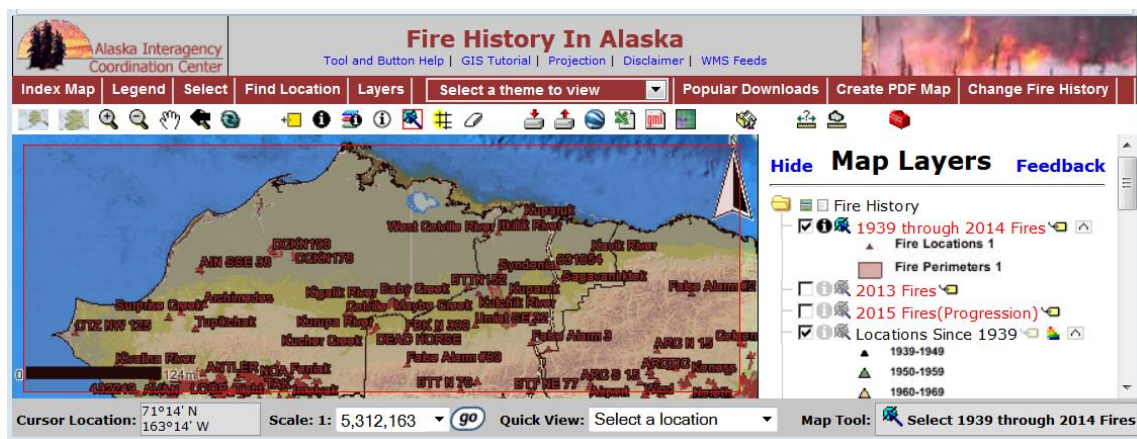
The best method to select the optimum set of data will strongly depend on the attribute or area desired. For example, if only interested in fires that started in the Military Fire

Management Zone from 1939 through 2007, one applicable selection method would be the query builder.

Option 3: Using the ArcIMS Site Only

It is not necessary to download the entire Fire History Database or selected sets for users with limited needs. By using the skills explained in Options 1 and 2, users can navigate to the desired fire locations and/ or perimeters, and create specialized maps without ever having to use an ArcGIS application.

1. Navigate to the desired fire locations and/ or perimeters
2. Select additional layers to be displayed if desired (roads, fire management zones, etc.)
3. If you need background layers that are not provided, you can temporarily Upload shapefiles to the ArcIMS site using this command—look for the icon on the top menu bar.
4. Click on "Save Map Image" in the upper toolbar or click on "Create PDF Map" in top red toolbar.

Things to Remember:

The Alaska Large Fire History Database contains fire origin locations and perimeters for all fire locations and available perimeters, regardless of size, from 1939-1969 (given limited availability of mapped fire perimeters in those early years) and 1990 to present. Fires smaller than 1,000 acres between 1969-1990 have not yet been digitized, although that work is in progress by AICC-Intelligence branch. Keep in mind, not all fire locations in the database have an associated fire perimeter—they may only be represented by the reported point of origin in the "locations" database.

Also, more detailed step by step instructions explaining the tools and functions available on the ArcIMS site can be found by clicking on "***Tool and Button Help***" and "***GIS Tutorial***" found in blue type above the red tool bar. If further assistance is needed, contacts are given at the end of the "***Tool and Button Help***" information page.

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