## How to View Farm Service Agency Aerial Photos of Your Farm on Your Home Computer

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The amount of information available on the web is increasing everyday. Did you know you could download an aerial photograph of the farm fields in Stevens county and view them on your home PC? We will discuss some web site links and software that allow you to access this public information.

Files and viewing software may be downloaded by following links displayed on the Land Management Information Center (LMIC) web site. LMIC (sounds like limic) offers services and products that promote the effective use of geographic data and geographic information technology to benefit the people of Minnesota.

The LMIC web site explains "For almost two decades, the U.S. Department of Agriculture, Farm Services Agency (FSA) has coordinated mid-summer annual flights of Minnesota's agricultural counties. The natural color photos are used to monitor various farming programs of the department. Digital imagery is collected by the National Agricultural Imagery Program (NAIP) and is currently available for 2003, 2002 and 2001; 35mm slides are often available for previous years."

We thought that you maybe interested in how to access those photos from your home computer.

On the LMIC web site <u>http://www.lmic.state.mn.us/</u> choose the "2003 Color Orthophotos" link. From there, choose the "<u>Download county files in MrSID format</u>" link. Scrolling down on this page you find a list of counties that are available to download. The files are very large so if you decide to try to download one, you may want to start this download when you won't be using your pc for awhile, for example before you go to bed at night! A high speed internet connection would be very helpful here. Click on the county name and a window should open that asks you a few questions. Create a new folder on your PC for the download file and choose "Save to disk". The file will be downloaded with a .zip extension. I have Windows XP on my PC, and after downloading the file, I found that double clicking on the file started an "unzip wizard" that "unpacked" the downloaded file.

The files are in a proprietary data format that allows the file sizes to be compressed greatly without loss of quality. Lizard Tech. Inc. (see disclaimer) develops and markets software that allows you to quickly view any portion of the MrSID image. Lizard Tech provides two pieces of software that you can download for free to view these files. One tool is a plug-in for web browsers and one is a stand-alone program. We chose to try the standalone application.

To download the stand-alone viewer first click on the "2003 color orthophotos" link on the LMIC site. Then choose the "MrSID Help Page" link. This link takes you to the following url: <u>http://www.lmic.state.mn.us/chouse/mrsid\_help.html</u>. Under the heading "How do I look at MrSID files?", choose the "<u>GeoExpress View download page</u>" link. Scroll down and click on the "**GeoExpress View Trial** " link.

Clicking on the trial link brings up an input form and a license agreement form. Fill in this form and choose the "I agree" button.

This is a fairly large file (12 Mb), so depending on your internet connection speed be prepared to wait. When the file download window prompts you to open or save to the disk, create a folder for this file and chose "Save to disk".

After downloading, double click on GeoExpressViewWin32.exe to start the installation program. You need to answer a few questions during installation. Using the default folder to install the software is usually a good choice. After installing, you will find the GeoExpressView icon on your desktop. Start the application by double clicking on the icon. Select the "File/ New Project" menu choice. Then select the "File/ Add New Layer" menu choice. Browse to the photo file you downloaded earlier. The Stevens County photo file name is ortho\_e1\_1\_mn149.sid. If you download the Swift county file, it is named ortho\_e1\_1\_mn151.sid. The mosaic file of aerial photos doesn't look like much at this point, but you can click on the zoom tool (+ sign) to zoom in on your farm. This may take a little experimenting. You click roughly near the area you are interested and drag a box around a broad area. When you see a little more detail you can use the zoom tool again to get closer to your target.

This Picture is a Mosaic of Farm Service Agency (FSA) Aerial Photos for Stevens County Available On-line.



This Aerial Photo of Morris Airport was Retrieved from Farm Service Agency Photos Available On-line.



The photo of the airport may be a familiar site if you are a pilot. After zooming in on the Morris Airport in the Geo Express View Software, we selected the "Tools/Export" menu choice to export the area I was interested in to a .jpg file. I then inserted the image into a Word document. Another way to do this is to click on the camera icon in the Geo Express View Software, "snapshot to clipboard" and paste the image into another program such as a word processor or spreadsheet.

In conclusion, we have talked about the steps you can take to view FSA photos of your farm on your home pc. This is just one of many pieces of information we now have at our finger tips on the internet. Let me know if you found this article interesting or useful or if you have any questions. My email is <u>swagner@morris.ars.usda.gov</u>. The instructions included in this article will be posted on the USDA-ARS Soils Lab homepage. Visit out site at http://www.morris.ars.usda.gov.

Disclaimer: Names are necessary to report factually on available data; however, the USDA neither guarantees nor warrants the standard of the product, and the use of the name by USDA implies no approval of the product to the exclusion of others that may also be suitable.

This FSA Aerial Photo of Stevens County Farm Land South and East of Morris was "zoomed in on" from a Mosaic file that Covers the Entire County. Notable in the photo is the golf course near the bottom of the photo and the Pomme de Terre River winding through the landscape.

