

Geologic Site of the Month
November, 1999

Aerial photographs of Maine - Views from the sky



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Introduction

Aerial photographs are used by a variety of people to investigate the ground surface. Bedrock geologists use air photos to locate access roads and rock outcrops. Surficial geologists use stereo photos to identify landforms deposited by glaciers. Soil scientists use air photos to delineate different soil types. Land-use planners, hydrogeologists, and surveyors use photos to locate points of interest without having to travel to the site. Hunters and hikers use air photos to scout out access routes. Historical air photos are used to identify land use pattern changes. Access to aerial photographs used to be a difficult and time consuming process, but new web sites have made selecting and obtaining photos an easier process.

Aerial photographs of Maine are available from a number of sources. Agencies of the federal government, state government, and private business all provide photos of Maine. The federal government is the biggest source, with both the U. S. Geological Survey and Farm Service Agency holding the largest collections. Private companies in Maine also provide aerial photography. Many city and town governments have contracted to have their municipalities flown, and these aerial photographs are often displayed with the local tax maps.

Photos are available at a variety of scales. Small scale photography, photos that cover broad areas of the state, have scales that range from 1:58,000 to 1:120,000. Large scale photography scales range from 1:4,800 to 1:40,000. Many photos are taken either in early spring or late fall to get "leaf-off" coverage. This provides a clearer picture of the ground surface. Photos come in black and white (most common), color, and color infrared.



Aerial Photography

Stereo air photos are taken when an airplane flies along a predetermined route taking photos at specific coordinates and intervals. Photos in each flight line overlap. Viewing these overlapping photos through a stereoscope gives a three-dimensional image of the land surface. Stereo viewing has a variety of uses including tree-typing, drainage basin studies, and terrain analysis. The government agencies and private companies listed below provide stereo coverage of areas in Maine. Oblique photos of Maine are available from businesses that are often located at airports. Companies include Telford Aviation in Bangor, Waterville, and Owls Head; and Fox Photography Services in Belgrade.



Sources of Aerial Photography for Maine

Aerial Survey and Photo, Inc.

[Aerial Survey and Photo](#) has been in business since 1975 and is located in Norridgewock, Maine. Their air photo library includes images from dozens of Maine cities and towns. A map showing an area of interest can be faxed to the company for more information.

For more information contact:

Aerial Survey and Photo, Inc.

546 Airport Road

Norridgewock, Maine 04957

Telephone: 207-634-2006

Telefax: 207-634-2008

Email: airlsurv@somtel.com



Sources of Aerial Photography for Maine**James W. Sewall Company**

[The Sewall Company](#) has a long history of flying state and local projects at various altitudes throughout Maine. They have their own photo lab, improving turn-around time on air photo requests. Photo coverage varies across the state. Contact the company for more information. Faxing them a map of the area of interest is also a method of obtaining information.

For more information contact:

James W. Sewall Company
147 Center Street, P. O. Box 433
Old Town, Maine 04468
Telephone: 207-827-4456
Telefax: 207-827-8928



Sources of Aerial Photography for Maine**Farm Service Agency of the U. S. Department of Agriculture.**

To obtain Farm Service Agency aerial photography you may either visit the State FSA office (Stillwater Avenue, Orono) or your local county office. If you don't have access to an FSA office, send a legal description of the area of interest, including township, range, latitude, longitude and other pertinent information to the Salt Lake City office at the address below (include payment). See the [FSA Aerial Photography Field Office](#) for ordering information and forms.

The Farm Service Agency can provide the following photo series:

- NAPP program: quarter-quad spacing; altitude: 20,000 feet; scale 1:40,000
- Maine Color infrared coverage, flown 1991-1992
- Maine B&W coverage, flown 1996 (eastern Maine) and 1997 (northern and western Maine)
- Various other B&W coverages flown at earlier dates

For more information contact:

USDA Aerial Photography Field Office

2222 West 2300 South

Salt Lake City, Utah 84119-2020

Telephone (801) 844-2922



Sources of Aerial Photography for Maine

U.S. Geological Survey

The U.S. Geological Survey's [Earth Science Information Center](#) (ESIC) maintains an informational database of aerial photographic coverage of the United States that dates back to the 1940's. This information describes photographic projects from the USGS, other Federal, State, and local government agencies, and commercial firms. Photos can be obtained through the [ESIC](#) web site or by calling the toll-free number below.

The [EROS Data Center](#) in Sioux Falls, South Dakota, is the largest repository of aerial photographs in the world. It is part of the USGS Earth Science Information Center. The EROS Data Center provides all types of remote sensing information, including satellite images and digital geologic and cartographic data. The [National Aerial Photography Program](#) (NAPP) is administered by this office. The NAPP program provides high altitude aerial photographs of Maine in both color and black and white. To locate the NAPP flight lines and photo numbers of interest, and to order photos, use the USGS [EarthExplorer](#). (Note that the same NAPP photos may be available from the Farm Service Agency for a lower price.)

For more information contact:

Customer Services

U.S. Geological Survey

EROS Data Center

47194 252nd Street

Sioux Falls, SD 57198-0001

Telephone: 800-252-4574

Telephone: 605-594-6151

Toll-free telephone: 1-888-ASK-USGS

Fax: 605-594-6589

[Contact USGS](http://www.usgs.gov/ask/index.php): <http://www.usgs.gov/ask/index.php>



Sources of Aerial Photography for Maine**Maine Geological Survey**

The Maine Geological Survey has a reference set of aerial photographs in its library. These are Farm Service Agency (formerly Soil Conservation Service) photographs. One set was flown in the mid-1960's and is 1:15,840 or 1:20,000 scale. There is complete state coverage with that set. The second set of photographs was taken from 1978 to 1980. The scale of that set is 1:40,000. The northwest corner of the state is not covered in that set of photography.

A reference set of color air photos (flown in May, 1986) of southern Maine's sand beaches is available for viewing at the Maine Geological Survey office in Augusta. These are detailed (1:4,800 scale) photos showing sand beach environments.

For more information contact:

Maine Geological Survey
93 State House Station
Augusta, Maine 04333
Telephone: 207-287-2801

