

Picture Post

<http://picturepost.unh.edu/>

Featured Picture Post
panorama: [Concord
Academy, Arena Farms
Post 2.](#)



Use the navigation buttons on the left of the map to zoom. Click and drag to pan around.



Picture Post is a part of the Digital Earth Watch (DEW) network. DEW supports environmental monitoring by citizens, students and community organizations through digital photography and satellite imagery.

You can...

- contribute photographs to any Picture Post
- add your own Picture Post
- measure environmental change in your neighborhood, and
- contribute to science networks.

[Learn how!](#)

Read about us in [Earthzine.](#)



Click on one of the icons on the map to see pictures ...and more!

WE ARE PICTURE POSTS



What is a Picturepost

Featured Picture Post
panorama: [Wells
Reserve Beach.](#)

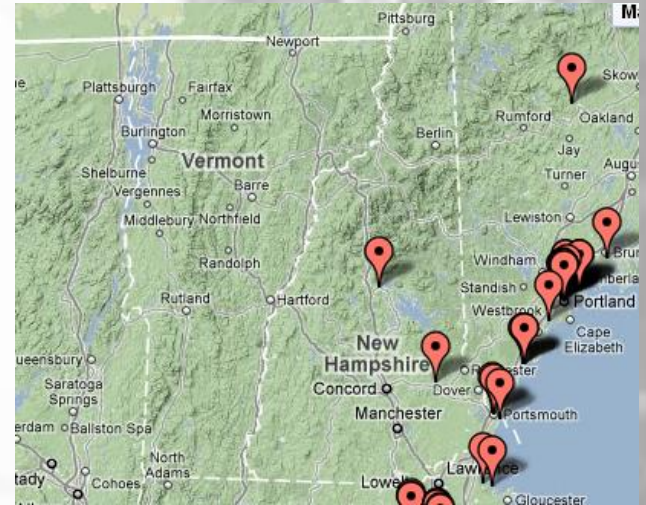


A stable permanent platform
in an ecological important location
where you take
photographs
over time



What you can do with Picturepost

- Contribute photographs to the scientific network
- Track changes in your site over time
- Link your findings to satellite imagery of your area



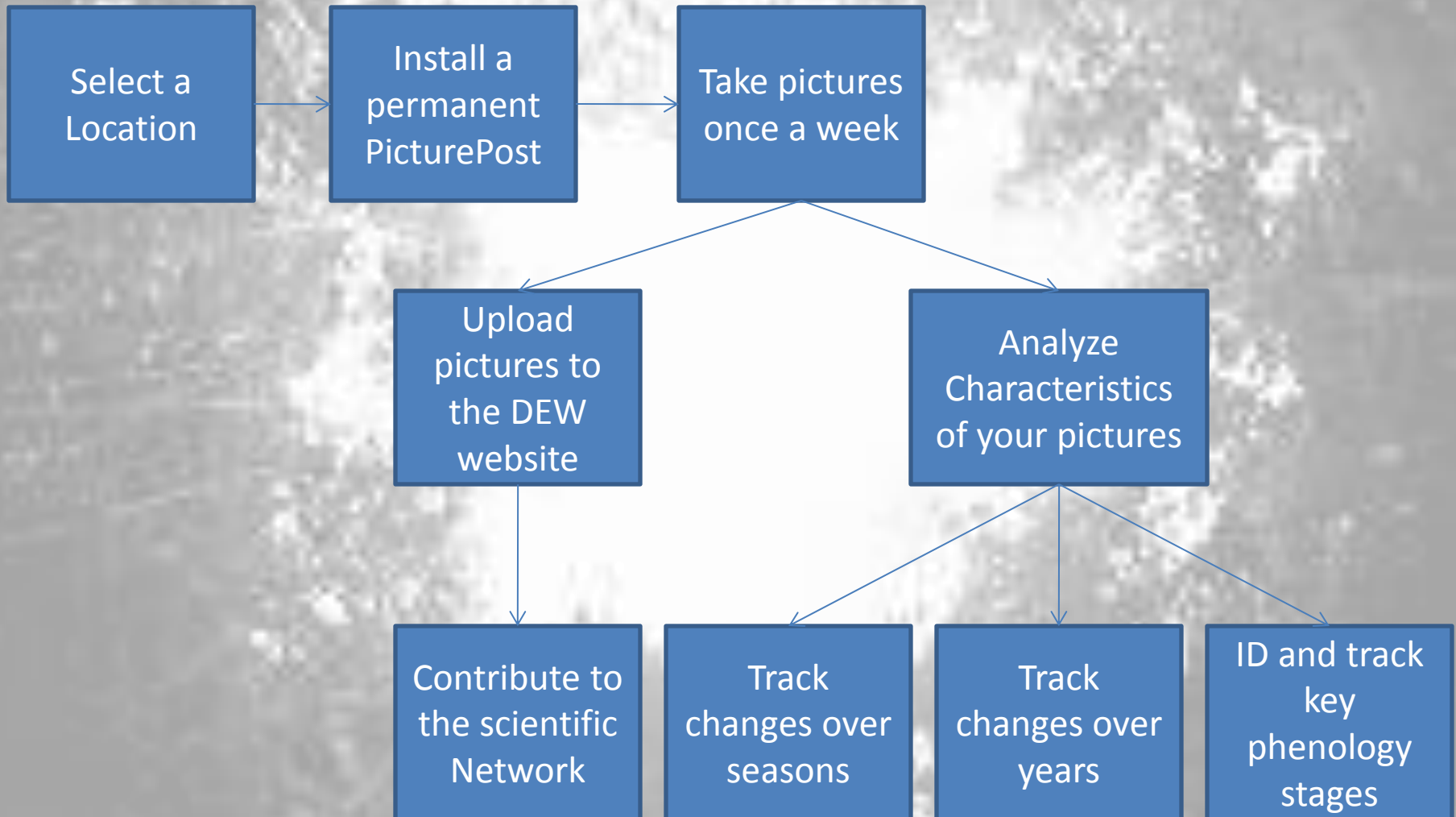
What you need



- A permanent plot to visit
- Digital Camera
- Camera Mounting Block and post
- Compass
- Computer (for image upload)
- Downloaded freeware
- A group committed to taking regular photos of their site



The Picture Post Process



The Picture Post Process

Select a
Location

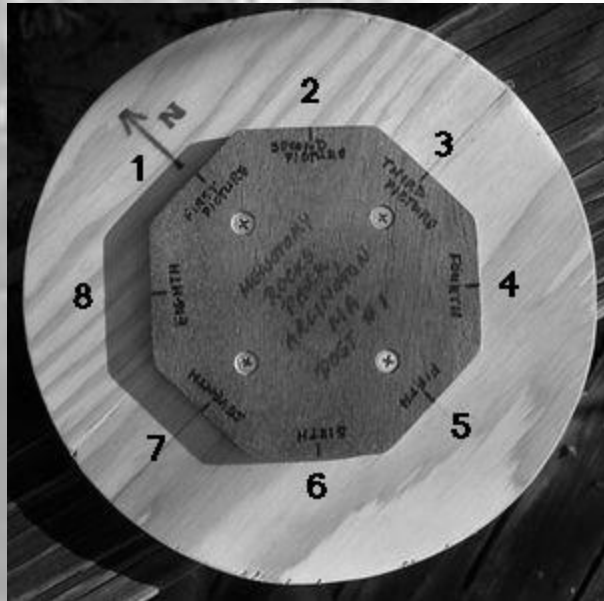


- Choose an easily accessible location
- Include vegetation in each canopy level
- Include a landmark feature for reference



The Picture Post Process

Install a
permanent
PicturePost



The Picture Post Process

Take pictures
once a week

During a most of the year, take photographs once a week. To study the seasonal cycles, take photographs once a day during spring “green up” and autumn “green down.”



- Record the time and date of your photos
- Take 8 photos of the landscape (clockwise starting N) and one of the sky

The Picture Post Process

Take pictures
once a week

									2010-05-07 08:49 flag
									2010-04-20 10:40 flag
									2010-03-20 08:19 flag
									2009-12-26 09:00 flag

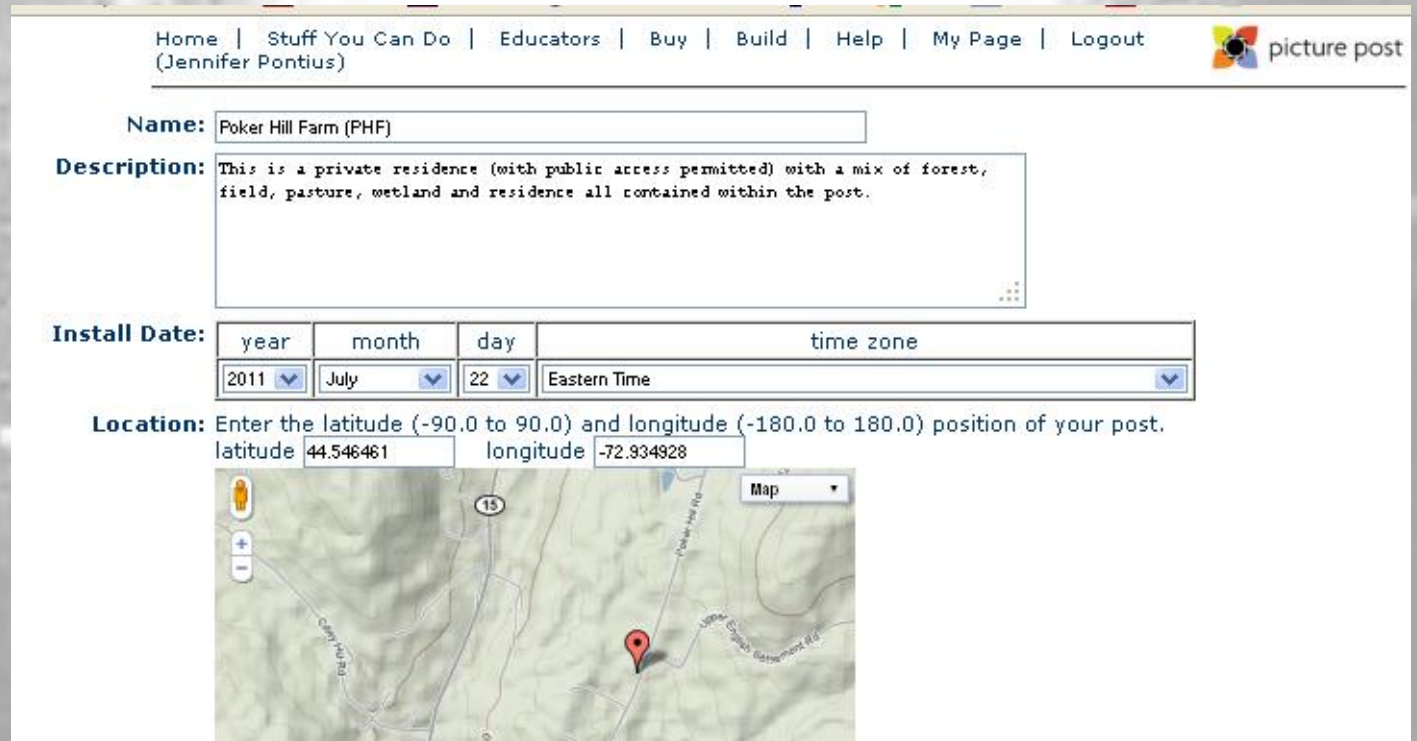
The Picture Post Process

Upload
pictures to
the DEW
website

1. Register and Log in to the site
2. Create your Picture Post location within the database

http://picturepost.unh.edu/help_addpost.jsp

Contribute to
the scientific
Network



Home | Stuff You Can Do | Educators | Buy | Build | Help | My Page | Logout

picture post

Name: Poker Hill Farm (PHF)

Description: This is a private residence (with public access permitted) with a mix of forest, field, pasture, wetland and residence all contained within the post.

Install Date:

year	month	day	time zone
2011	July	22	Eastern Time

Location: Enter the latitude (-90.0 to 90.0) and longitude (-180.0 to 180.0) position of your post.

latitude 44.546461 longitude -72.934928

Map


The Picture Post Process

Upload your photos on your “My Page”

http://mvh.sr.unh.edu/mvhtools/uploading_photos.htm

Upload
pictures to
the DEW
website

Contribute to
the scientific
Network

Home | Stuff You Can Do | Educators | Buy | Build | Help | My Page | Logout (Jennifer Pontius)  picture post

Post: [Poker Hill Farm 1](#)
Click [here](#) to view all pictures for this post.

N	NE	E	SE	S	SW	W	NW	UP

This is a reference set of pictures to help you orient yours.

Describe your picture set.

N	NE	E	SE	S	SW	W	NW	UP	Workspace
									Pictures not in order? Drag one here to swap or delete.

How to Upload:

- **Step 1.** Click the "Browse" or "Choose File" button below to choose an image file to upload. This opens a window that shows directories on your computer. Locate your file and select it. Once selected, the file name appears in a list below. Files must be JPEGs.
- **Step 2.** Repeat Step 1 to build your upload list. You can choose up to 9 files.
- **Step 3.** Click "Upload" to upload your files all at once. If you prefer, you can upload fewer files at one time, but this may take longer.
- **Step 4.** Arrange your files in the correct order. You can remove files and repeat the upload steps to add files until you have the picture set you want.
- **Step 5.** Click "Submit" to finish.

VTPHF1NN072211.jpg	<input type="button" value="Remove"/>
VTPHF1NE072211.jpg	<input type="button" value="Remove"/>
VTPHF1EE072211.jpg	<input type="button" value="Remove"/>
VTPHF1SE072211.jpg	<input type="button" value="Remove"/>
VTPHF1SS072211.jpg	<input type="button" value="Remove"/>
VTPHF1SW072211.jpg	<input type="button" value="Remove"/>
VTPHF1WW072211.jpg	<input type="button" value="Remove"/>
VTPHF1NW072211.jpg	<input type="button" value="Remove"/>


Download the Panorama Software

Visualize
changes over
time

Panorama
Factory
Software

Panorama Factory

Panorama Factory hilft, die notwendigen Einzelbilder eines künftigen Panoramas perfekt zu verknüpfen. Dabei werden Unregelmässigkeiten bei der Belichtung einzelner Fotos auf das Gesamtergebnis abgestimmt. Eine Vielzahl von Werkzeugen hilft Fortgeschrittenen, wie absoluten Neulingen professionelle Ergebnisse zu erzielen. Mit wenigen Mausklicks entstehen in Minuten passgenaue Panoramen. Das Programm ist ein toller Ersatz für kostenintensive Weitwinkel-Objektive oder Konverter. Als kleinen Vorgeschmack können Sie **hier** ein Panorama von Bielefeld ansehen, das mit diesem Programm gefertigt wurde.

Übersetzen mit Babylon | Panorama Factory 



Hersteller: **John Strait**

Lizenz: **Freeware**

Betriebssysteme: **Windows 98 | ME | 2000 | XP | Vista | 7**

Sprache: **Englisch**

Dateigrösse:  **2.45 MB**

Forum: **Meinungen, Hilfe und Support**

DOWNLOAD

FORUM



The Panorama
Factory (2)

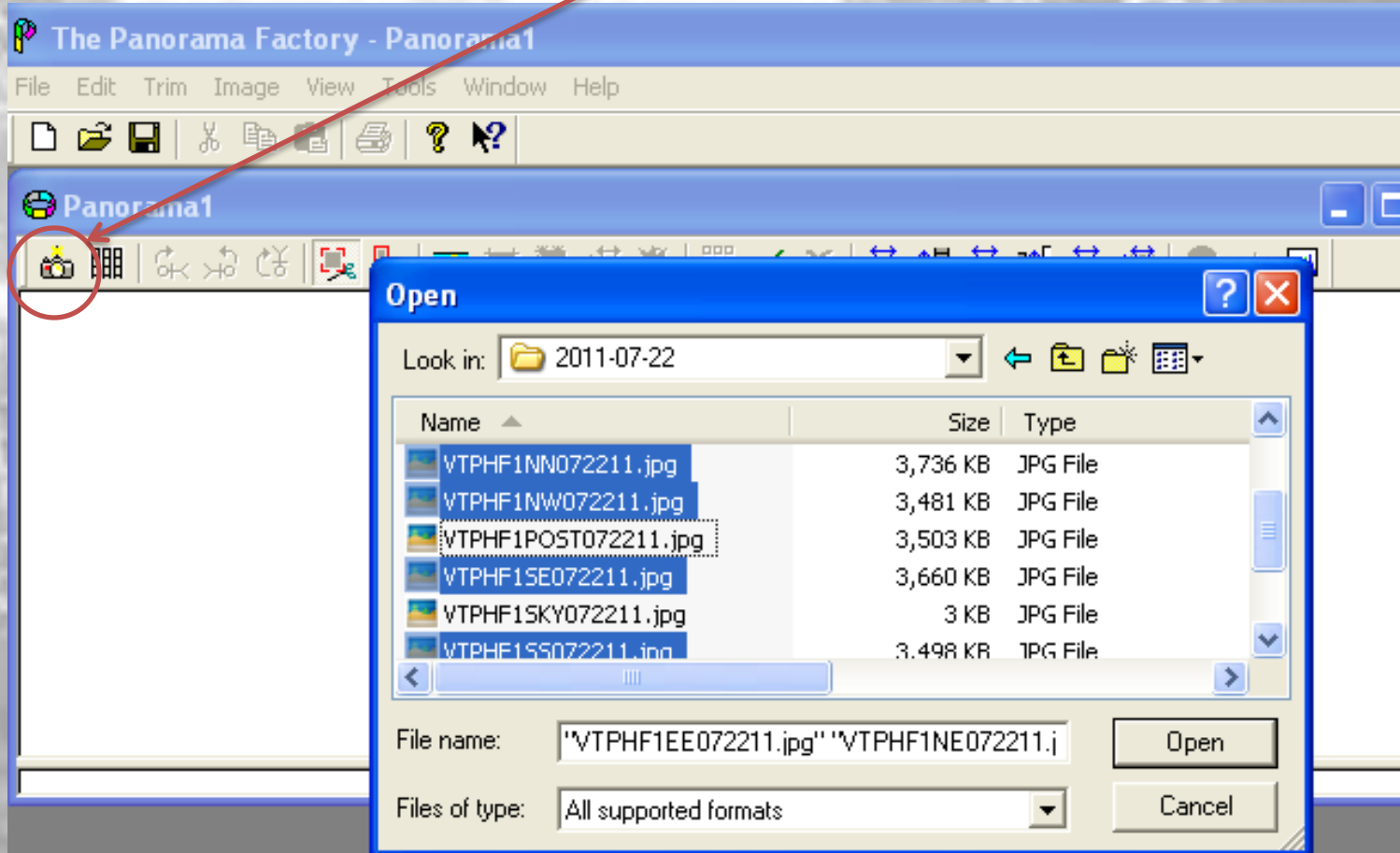
<http://www.foto-freeware.de/panoramafactory.php>

Panorama Software

Upload your photos into the Panorama Factory by clicking on the Camera Icon

Visualize
changes
over time

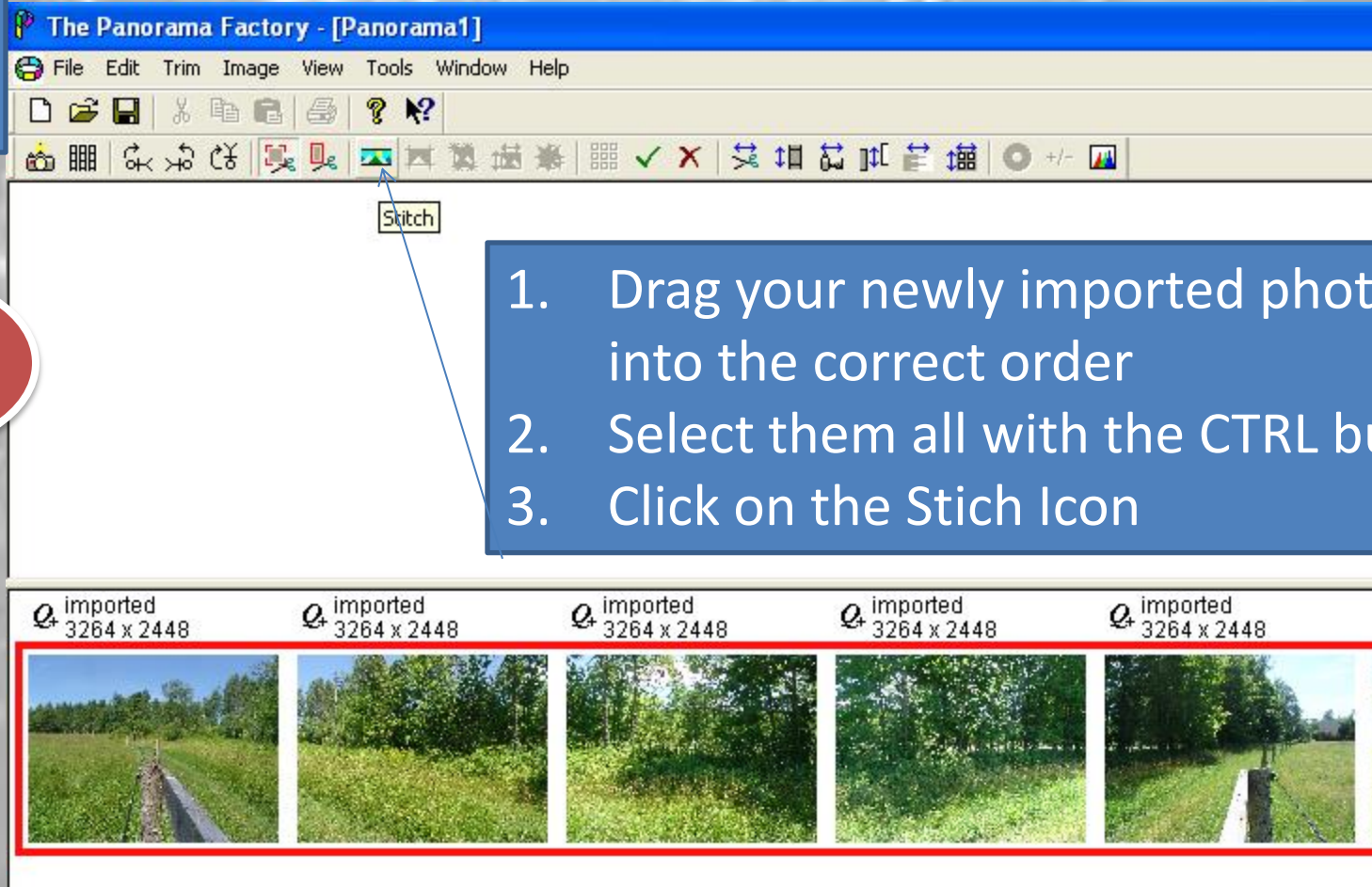
Panorama
Factory
Software



Panorama Software

Visualize
changes
over time

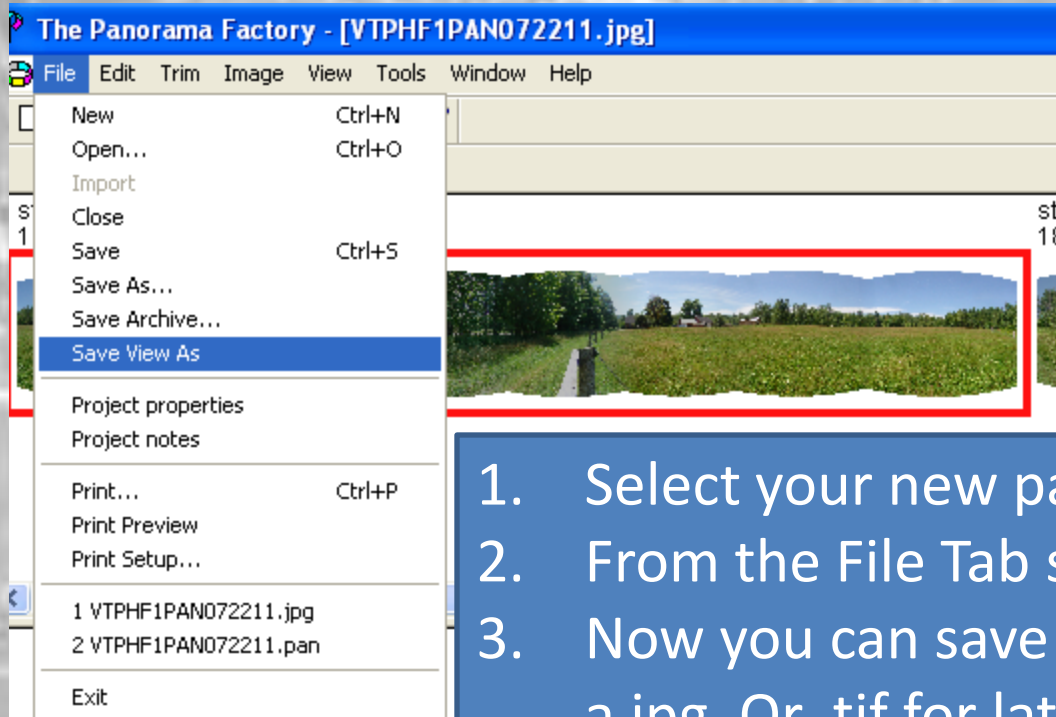
Panarama
Factory
Software



Panorama Software

Visualize
changes
over time

Panarama
Factory
Software



1. Select your new panorama
2. From the File Tab select Save View As
3. Now you can save your panorama as a jpg. Or .tif for later analysis or stacking.

Animate Your
Images

More Visualization Tools

Visualize
changes
over time

Animate Your Images

Panorama
Factory
Software

Make your own Picture Story
using Windows Movie Maker
or Apple's QuickTime Pro



Download the ADI Software

Quantify
Canopy
Characteristics

Analyzing
Digital
Images
Software

The screenshot shows the 'Measuring Vegetation Health' website. The navigation bar includes links for Home, Announcements, Challenges, For Educators, Site Map, Investigations, Data Links, Free Software, Partners, and Useful Tools. A search bar and a date indicator (April 7, 2008) are also present. The main content area lists software bundles for workshops in 2008, categorized by Mac OSX and PC Windows versions. A file opening dialog for 'AnalyzingDigitalImages.zip' is overlaid on the right, showing options to 'Open with', 'Save File', or 'Do this automatically for files like this from now on'. The dialog also indicates the file is a zip file from 'http://mvh.sr.unh.edu'.

Measuring Vegetation Health

Home Announcements Challenges For Educators Site Map
Investigations Data Links Free Software Partners Useful Tools

Google Search MVH Web April 7, 2008 View Print Version

Each software program and guide that follows may be downloaded and used for all education uses.

New Software Bundles for Workshops in 2008

Mac OSX versions:

- [Color Basics Software 2008](#)
- [Digital Image Basics Software 2008](#)
- [Analyzing Digital Images Software 2008](#)
- [Forest Analysis Software 2008](#)
- [Vegetation Analysis Software 2008](#)

PC Windows versions:

- [Color Basics Software 2008](#)
- [Digital Image Basics Software 2008](#)
- [Analyzing Digital Images Software 2008](#)
- [Forest Analysis Software 2008](#)
- [Vegetation Analysis Software 2008](#)

Measuring Vegetation Health Software

Programs are listed in the following sequence of **tools**. Utility programs are also available and a

For each concept grouping, software is bundled for one-stop downloading. Or consider downloading all of the programs at once.

Opening AnalyzingDigitalImages.zip

You have chosen to open

AnalyzingDigitalImages.zip
which is a: zip File
from: http://mvh.sr.unh.edu

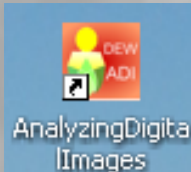
What should Firefox do with this file?

☐ Open with Browse...

☒ Save File

☐ Do this automatically for files like this from now on.

OK Cancel



<http://mvh.sr.unh.edu/software/software.htm>

Analyzing your imagery

Open the Analyzing Digital Imagery Program
Click Open a Picture and browse to your image
Select NONE for the Calibration Method

Quantify
Canopy
Characteristics

Analyzing
Digital
Images
Software

Introduction to Analyzing Digital Images

File Utilities Measurements Save Color Masks Apply Color Masks Help

Intro Spatial Analysis Enhance Colors Mask Colors Check Color Quality About

Three buttons above have tools for visualizing and measuring spatial and spectral (color) qualities and relationships in digital images.

(1) Spatial Analysis tools measure size and colors of features. Spatial measurements may be saved to a text file for analysis with spreadsheet software.

(2) Enhance Colors tools let you change how the image is displayed.

(3) Mask Colors tool lets you count the number of pixels within a range of colors within the original or a color enhanced image.

Images transfer fluently to each toolset.
Modified images may be saved or printed.

Two utilities are in the Utilities Menu:
1) Trim images to speed up processing time, and
2) Combine two or more images into one for comparison (merge color layers from separate images, subtract images, or average images).

Other useful tools in the File Menu:
1) Color histogram of the whole image or selected areas
2) Color along Selected Line.

Although these tools were not designed to create artistic images, beautiful and exotic looking images are possible - so save and share!

Measure a Feature's Size and Color with Spatial Tools

Change Colors to See New Patterns with Enhancement Tools

Select Method to Calibrate the Pixel Size

Known Pixel Size Click if you know the size of the pixels, which is common for orthophotographs from aerial reconnaissance and satellite imagery.

Scale Present in Image Click if there is a linear scale located in the image. This includes photographed objects of known length (ruler, penny, clipboard, etc.) or a distance scale on digital maps or satellite imagery.

None Click if there is no way to know the size of the pixels in the image.

Open a Picture

Analyzing your imagery

Select the Rectangle Tool to isolate an area of vegetation in your image

Quantify
Canopy
Characteristics

Analyzing
Digital
Images
Software

Use Spatial Analysis Tools

File Utilities Measurements Save Color Masks Apply Color Masks Help

Intro Spatial Analysis Enhance Colors Mask Colors Check Color Quality About

Spatial tools measure the color and size of features in digital images.

Select Version of Image to View and Analyze

☒ Original ☐ Enhanced ☐ Masked

Rectangle Tool

Select Spatial Tool

Pixel Tool

Line Tool

Rectangle Tool

Polygon Tool

Angle Tool

Stop Point 3221 1827

Number of Pixels 455,248

Color	Intensity [%]
Average Red	63
Average Green	69
Average Blue	41

Intensities of colors range from 0%, meaning none of the color is present, to 100%, when maximum color is present.

VTPHF1SS072211.jpg is 3264 by 2448 pixels

When zoomed in, pan around the image by using the arrow keys or

Analyzing your imagery

Record your color intensities for the Red,
Green and Blue Bands

Quantify
Canopy
Characteristics

Analyzing
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Use Spatial Analysis Tools

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VTPHF1SS072211.jpg is 3264 by 2448 pixels

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Analyzing your imagery

Calculate your greenness Index as:

$$\text{Greenness Index} = \frac{\text{Green}}{\text{Red} + \text{Blue} + \text{Green}}$$

Quantify
Canopy
Characteristics

Analyzing
Digital
Images
Software

Color	Intensity [%]
Average Red	63
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Intensities of colors range from 0%, meaning none of the color is present, to 100%, when maximum color is present.

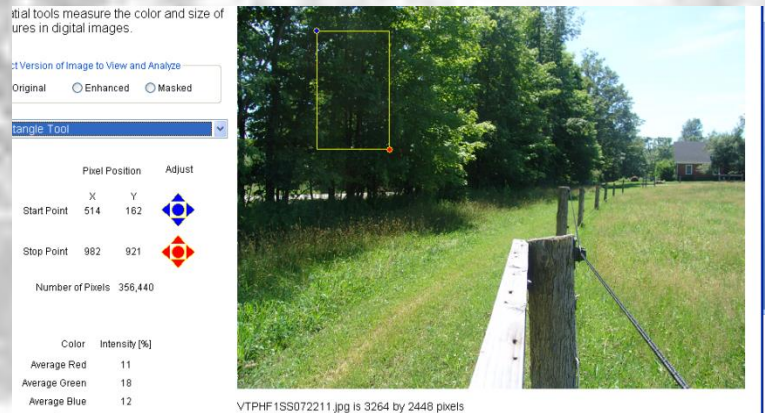
$$\frac{69}{(63 + 69 + 41)} = 0.398$$

Analyzing your imagery

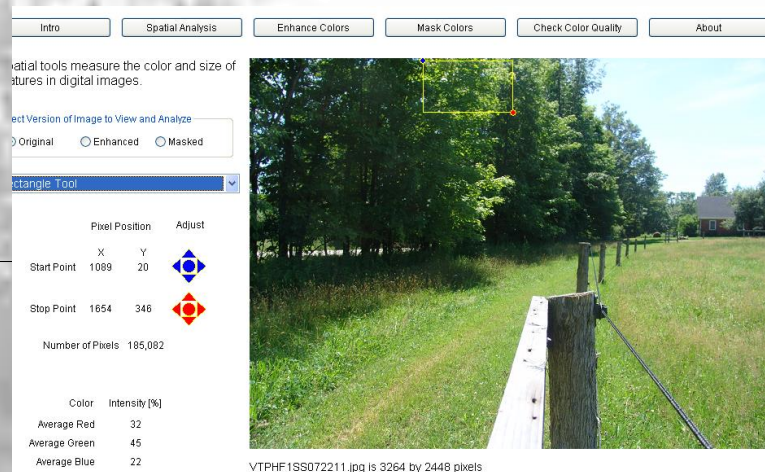
Investigate how grass compares to trees or how shadow compared to sunlit areas

Quantify Canopy Characteristics

Analyzing Digital Images Software



$$\frac{18}{(11+18+12)} = 0.439$$



$$\frac{45}{(32+45+22)} = 0.455$$



A wealth of information

Pulling it all together