If you are reading this on your computer display, remember that **Acrobat Reader** has a **zoom** feature (under "**View**" in your top tool bar) for enlarging or reducing text and graphics.

Next Computer Club (BVCC) Meeting

Digital Camera Tricks. Moving picture files to your computer. Len Nasman

April 8, 2013 7:30PM Glenn Center

New Quick Index

You can now jump directly to articles in this newsletter. Just left click on the Index listing.

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No Notes from Kent

Sorry, Kent is on vacation this issue. He is off on a cruise. Jealous? How about taking a virtual cruise?

Travel Cameras

Kent's cruise ship will travel through the Panama Canal. Go <u>here</u> to see a web camera view of the canal. You will see a live view of ships passing through the locks. You might eve see Kent wave if

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you look at the right time. Scroll down the display to see what ships are in the neighborhood.

http://kroooz-cams.com/portcams/so_america/miraflores1.php

Be sure to check both Camera 1 and Camera 2. Here is another canal view from Puente Centenario.

http://kroooz-cams.com/portcams/so_america/centennial.php

Want to see the waves splashing on a tropical beach? Visit the <u>Villa La Estancia</u> page and then click on the webcam button.

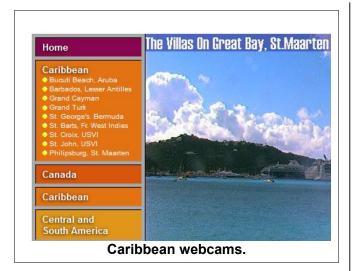
http://www.cabovillas.com/properties.asp?PID=87

Try the webcams listed on the left side of this page to get views around the Carribean.

http://www.krooozcams.com/portcams/caribbean/st maarten.php

When you are on any of these web pages, look around for other things to click on. There are endless possibilities for exploring on your computer screen.

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Ship Cams

A lot of cruise ships have live webcams that let you see views from the ships. Here is an example from Norwegian cruise lines.



http://kroooz-cams.com/ncl-fleet.php

Port Cams

This web site provides access to a number of cameras showing the Galveston port area.



http://www.galveston.com/harborvideocam/

And my favorite webcam collection shows ferries and cruise ships coming and going in Stockholm, Sweden.



Google search for webcams and discover more exotic sites to visit. Even if we can't go cruising with Kent, we can do some serious armchair traveling.

Digital Photography

By Len

Digital cameras are everywhere and it's getting hard to find film for the old 35mm cameras. The good news is that for most average users (and a lot of

professionals) the quality of digital pictures competes very well with the film cameras.

There seem to be two categories of questions about digital cameras; "What kind of camera should I get," and "How can I print or email my pictures."

Some Digital Camera Basics

Just as with older film cameras, there are point and shoot cameras, and SLR (Single Lens Reflex) digital cameras. SLR cameras are more expensive, bulkier to carry, and more complicated than point and shoot cameras.





Figure 1, SLR, and point and shoot cameras.

The point and shoot camera in Figure 1 has a zoom lens that automatically extends when the camera is turned on. This is common with current point and shoot cameras.

If you plan to do serious wildlife or sports photography, consider an SLR. The point and shoot cameras will work fine for most general applications.

Digital Camera Features, Resolution

If you are shopping for a new digital camera, the common advertised features you will be faced with are how many mega pixels the camera has, the





Figure 2, High and low resolution.

zoom range of the lens, and whether it can record movies. How do you choose?

Let's discuss megapixels first. *Megapixels* refers to the resolution of the digital images, and is similar to resolution of computer images. *Pixels* means picture elements. Digital images are made up of little squares, or pixels. In general the more pixels the higher resolution, and the better the picture.

Figure 2 shows the same picture with two different resolutions. When buying a digital camera, the question is how many megapixels is enough? The relationship between the pixels in a picture and how it will look when printed is a bit complicated. Digital camera and computer images are made up of pixels. Printers, however, do not use pixels. Printers use little dots and are specified by dots per inch.

Camera Specification	Maximum Resolution	Maximum Print Size
1 Megapixel	1280x960	5x7
2 Megapixel	1600x1200	8x10
3 Megapixel	2048x1536	11x14
4 Megapixel	2560x1920	20x30
6 Megapixel	3032x2008	20x30+
7 Megapixel	3072x2304	20x30+
8 Megapixel	3264x2448	20x30+
10 Megapixel	3648x2736	20x30+
12 Megapixel	4000x3000	20x30+

Figure 3, Megapixels vs print size.

To try to simplify the issue, we can concentrate on how large we want to print the final picture. Most people do not print pictures that are bigger than a standard piece of paper that is 8 ½ by 11 inches (in the US).

Figure 3 shows the relationship between megapixels and maximum print size. These numbers are fairly conservative.

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One sales argument used to support the idea that

higher megapixel cameras are better is that you need more resolution so that you can crop pictures. The table shows that a 12 megapixel



Figure 4, Cropping a picture.

camera gives you plenty of latitude for cropping.

Figure 4 demonstrates cropping a picture to make a new picture from a smaller part of the original.

As long as the resolution of the cropped image ends up within the parameters shown in Figure 3, the picture will look fine when printed.

If you are making pictures for display on the Internet, or for emailing to your friends, a resolution higher then 1024 by 768 is pretty much overkill. The larger the resolution, the bigger the file size, and the longer it takes to upload or download.

If you are making pictures to use in a document like this newsletter, the final pictures will be at most 3 ½ inches wide, and a resolution of 1024 by 768 will be more than adequate.

If you are making pictures to add to a DVD video, 720 by 480 is OK for normal situations. The newer HD or Blue-ray videos have a resolution of 1920 by 1080.

For the average user, it is nearly impossible these days to buy a camera that does not have enough megapixels. There are other factors that have a bigger effect on how good the picture looks. Basically, you can forget about megapixels when choosing a new camera.

Digital Camera Features, Zoom

In the old days, you had to buy extra lenses for telephoto or wide angle shots. Most digital cameras include zoom capabilities. There are two types of zoom, digital and optical. Forget about digital zoom. Digital zoom essentially decreases the resolution. Once you have taken the picture, you can get the same effect by cropping the picture.

Optical zoom uses the design of the camera lens. No matter how much you zoom in using optical zoom, the picture resolution remains the same. The problem with large zoom ratios is that not only does the image size increase, the camera shake also increases. Unless the camera is held very steady (usually only possible by mounting it on a tripod), you will get blurred pictures using a large zoom factor.

Some cameras try to overcome this problem by including a feature called image stabilization.

So, if you want to take pictures of the family, or snapshots of your vacation trips, jump in to the world of digital photography.

Make your own Trip tick

By Len

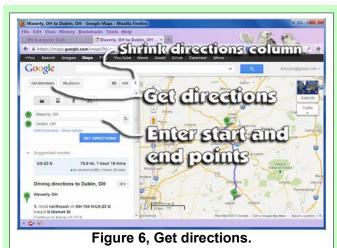
Going somewhere? Need a quick map and instructions? Here is a trick

- ✓ Open your web browser to the BVCC home page. (www.byres.org, then select Computer Club)
- Select the Maps link.



Select the Get directions button.

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- Select all of the directions text in the directions column by dragging the mouse pointer over it.

Enter your starting and ending points.

✓ When the directions text has been selected (it will be highlighted), press **Ctrl+C** to copy the text to the invisible clipboard.

Do not close the **Google Maps** window.

- Open your Word Processing program.
- ✓ Place the text cursor in your word processing program where you want to insert the text, then press Ctrl+V.

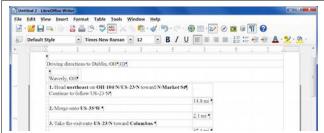


Figure 7, Paste directions in word processor.

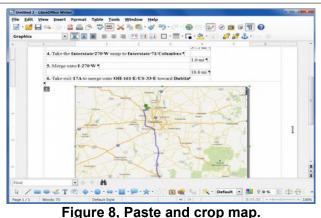
Next, the map will be added to the word processing document.

Do not close the **Word Processing** window.

✓ In Google Maps, select the shrink directions column (Hide panel) tool.

Use the mouse scroll wheel to zoom in and out on the map. Position the mouse pointer in the map, click the left mouse button, hold it down, and move the mouse to drag the map location around.

- Zoom to the part of the map you want.
- Press the Print Screen key on your keyboard. (This key is some times labeled **PS**, and sometimes Prt Scn.)
- Switch back to your word processing program and place the text cursor where you want to add the map. Then press **Ctrl+V** to paste the map.



The bad news is that the **Print Screen** trick captures more of the display than you want.

To capture contents of an open window rather than the entire display, use Alt+Print Screen rather than just *Print Screen*.

If you are using **LibreOffice** as your word processor, the good news is that you can easily crop the picture after it is in place.

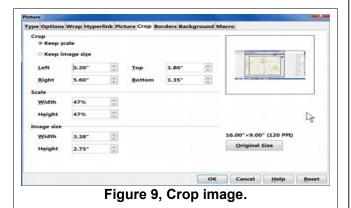
(I tried this in Microsoft Word 2000. I could crop the image, but it required a bit of trial and error to get the crop size the way I wanted.)

The next steps are for LibreOffice or OpenOffice users.

▶ Double click on the screen capture image in your word processor.

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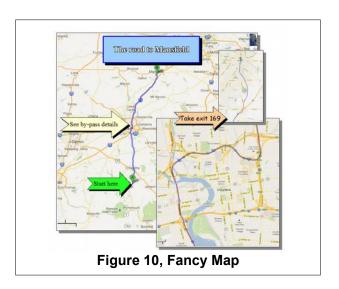
✓ In the *Picture* dialog box, select the **Crop** tab. Then adjust the Left, Right, Top and Bottom settings (referring to the little preview window) until you have the picture you want.



✓ If you like, select the **Borders** tab and add a border and shadow to your image.

When the map graphic is selected in LibreOffice, there will be corner and mid point gadgets on the graphic object. These can be dragged to re-size the graphic.

✓ To increase or decrease the map graphic size in LibreOffice, hold the *Shift* key *down* and **drag** a corner of the graphic object.



If you want to get fancy, you can capture several closeup map details and use the Print Screen trick to add them to your trip tip document. There are also drawing tools in LibreOffice that provide ways to enhance your graphics.

Now you have your own personal trip tip.

Hike the Grand Canyon

By Len

OK, I'll admit that I am no longer in condition to hike from the West Rim of the Grand Canyon down Bright Angel Trail to the Colorado River and back. However, that does not stop me from making the hike by way of my computer.

Google keeps adding new variations to their *Street Views*, and sent a hiker equipped with a special back pack camera down the Bright Angel Trail.



Figure 11, Google camera.

The result is that we can now make a simulated hike the length of the trail and inspect every view along the way. Every few steps you can look up, down, left, or right and feel that you are right there.

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A split screen option allows you to monitor or adjust your position along the trail. You click and drag



picture).

with the mouse to look up down and around on every picture.

Google has been extending the Street Views to parks around the world. Here is a link that will take you to world parks.



Figure 13, Google Street View Gallery (click on picture, scroll down).

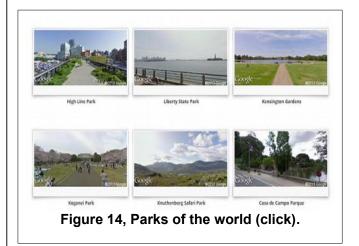


Figure 15, USA summer parks (click).



