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TC/PC Exists to
Facilitate and Encourage
the Cooperative Exchange of
PC Knowledge and
Information Across
All Levels of Experience

October 2025

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General Meeting Tuesday, October 14, 2025

7:00 PM

Steamdeck

Presenter: Jack Ungerleider

The Steamdeck by Valve is a portable gaming platform. It can play many of the games that are hosted on Steam but not all of them. Join us on Tuesday night to explore the Steamdeck and other portable gaming platforms..

Note: All TC/PC Meetings and SIG Groups will be virtual until further notice. Visit tcpc.com for info.

Tech Topics with Jack Ungerleider via Zoom at 6pm before the General Meeting.



The Digital Viking

The Digital Viking is the official monthly publication of the Twin Cities PC User Group, a 501(c)(3)organization and an all-volunteer organization dedicated to users of IBM-compatible computers. Subscriptions are included in membership. We welcome articles and reviews from members. The Digital Viking is a copyrighted publication and reproduction of any material is expressly prohibited without permission. Exception: other User Groups may use material if unaltered and credited.

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Full page (7½ x 9½)	\$100.00
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Contact Sharon Walbran at:: SQWalbran@yahoo.com

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Meets once or twice per year. All members welcome to attend.

Visit www.tcpc.com for meeting details.

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Editor Sharon Walbran

Lifespan of Various Digital Recording Media

By Joel Ewing, President, Bella Vista Computer Club Bits & Bytes, March 2025 https://bvcomputerclub.org president (at) bvcomputerclub.org

Floppy Disk

Sometimes the media was even bad when new. Claimed lifespan of 3 to 5 years, although maybe 10 years under ideal storage conditions. Shorter life if heavily used because read/write heads physically contact the recording surface and rub oxide off the surface causing physical damage over time.

CD and DVD

Unrecorded (blank) CDs and DVDs have 5 to 10 years of shelf life! Life expectancy of recorded CDs and DVDs may be as short as 2 to 5 years, could be a long as 10 to 25 years depending on the media quality and conditions under which they are stored. Improper handling can scratch the surface and destroy data. Use of inappropriate markers or adhesive labels on a DVD can also render data unreadable.

Hard Disk Drives

It is reasonable to expect a HDD that is heavily used to last 3 - 5 years. Moving mechanical parts will eventually fail. I have also seen lightly used HDD drives that have lasted as long as 10 years, but usually by that time they are obsolete for other reasons. There are reports that under ideal storage conditions a hard drive can be stored for 20 years and still retain its data. Magnetic signals tend to deteriorate with time and can also be affected by temperatures over 90° F or by exposure to other magnetic fields. Exposure to excessive humidity can also corrode internal components and shorten the HDD life.

Flash Storage (Thumb Drives)

These devices are typically designed to last 3 to 5 years based on "normal" usage, although some manufacturers offer much longer warranties, even up to a lifetime warranty. Every write or erase cycle shortens the device life by a little bit, but these devices can be designed for durability and longevity if you are willing to pay more. Storage at elevated temperatures also shortens their life. I've used maybe 25 different thumb drives over the last 25 years, but most of them are lightly used. One is still working after over 20 years. Only one has completely failed, and that was one I was given that had an unknown history.

Solid State Drives (SSDs)

These are faster and more durable than thumb drives (which also contain solid-state storage). Like thumb drives, write and erase cycles eventually will wear out the device, but current SSDs are designed to spread the wear more uniformly across the physical storage. For that logic to work well, some recommend you should always leave 10% to 30% of the SSD storage space unused.

The Operating System or a user may write data repeatedly in the same logical sectors of the SSD, but internally the SSD will store the data in different physical memory locations to distribute the wear across all parts of its storage. Most SSDs can last over 5 years and the most durable units over 10 years. Many SSDs have a wear indicator that counts down from 100% to 0%, which shows how much longer they can be used. One recommendation is that an SSD should be replaced once its media life remaining is less than 10%. Some SSDs may be better at retaining data in storage than others. An SSD should be able to retain data without power in storage for a minimum of 2 to 5 years, while some SSD manufactures claim retention for 15 - 20 years without power.

What This Means If Indefinite Archival is required

Since all media has some finite lifetime, and in some cases the drives that can access a particular media may become increasingly difficult to find, no archive media can last forever. This means either the old archived data must be copied from the old media to new media, or new backups must be made to new media before the old backup media has reached end-of-life.

This is one of the current limitations of digital archival, in that current record media can only be dependably stored for decades at best. Contrast that with archival of printed documents on high-quality paper that can be expected to survive in readable form for centuries if properly stored.

I wasn't that aware that blank CDs and DVDs can also deteriorate in a few years. I strongly suspect some of the CD blanks I still have around and rarely use are probably well past the recommended shelf life and may need to be discarded. It's even possible my impression that CDs are less dependable than DVDs may actually be an indication of the age of my CD blanks.

Mostly from https://www.arcserve.com/blog/data-storage-lifespans-how-long-will-media-really-last

https://datarecovery.com/rd/how-long-can-a-hard-drive-last-in-storage/#:~:text=The%20data%20retention%20rate%20of,retain%20all%20of%20its%20data.



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Organizing your photos - Part 1

By Lynda Buske Ottawa PC Users' Group (https://opcug.ca/) lynda.buske (at) opcug.ca

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In the next two newsletter articles, I plan to provide some suggestions for organizing your photos in a PC environment (Part 1) and then showing you ways you can search on your photos without renaming or tagging (Part 2).

In the PC environment, the easiest way to keep your image files organized is by creating file folders within the *Pictures* folder using *File Explorer*. Your system will automatically have a *Pictures* folder so you just have to create some sub-folders to suit your needs. Simply click on *Home/New folder* (or click on the icon on the top row) to create and name a new folder. I recommend you start by creating a folder called *Originals* and another called *Work Area*. (See Figure 1).

If using a camera app to download photos from your camera, it may automatically save your images in the root of the *Pictures* folder, perhaps also creating subfolders with year, month and day. You can either cut and paste these into your *Originals* folder or download your images directly from the SD card to the *Originals* folder.

I find having just the year, month and day is not enough information when I'm looking for a particular image months later. For sure the date is important but I also add on a descriptor such *Judy's* birthday or *Sunflowers*. I shoot hundreds of images at the Ottawa river each year so *Ottawa River* even with the date is not going to cut it. Instead, I will at least label the folder with the river location such as *Shefford* or *Blair*. (See Figure 1)

Once I have my images downloaded into folders within *Originals*, I immediately copy them all into the *Work Area* folder. I do no culling or editing from the *Originals* folder because it can be hard to tell which are the shots you want to keep forever until you start editing them, checking exposure levels, cropping etc. If you are really tight for space, you can cull some later but keep in mind that a solid-state terabyte drive can be bought for \$100-\$150 and a terabyte drive can be found for less than \$100. One terabyte drive can hold 100,000 10MB images!

Within the *Work Area* folder and sub-folders, I create even more for folders various reasons such as selections for Facebook. (See Figure 1). Because I take so many photos, I may have 100 folders build up in just one year. After about 6 months, I prefer to take some of the files & folders from the *Work Area* and save them by topic. So, the dozen folders I amassed in 2024 shooting the Ottawa river, will now be put into a topic folder *Ottawa*. Within that I have *Ottawa River* with specific subfolders for the locations I shoot the most often such as *Blair kayaks, Blair river ice, Blair foggy dawn*, etc. (See Figure 2)

This is just my personal system and it may not work for you. I do, however, recommend that everyone protect their out-of-camera images in an *Originals* folder. From there, the naming conventions and number of sub-folders within the *Work area* are up to you. My rule of thumb is that I should be able to find a 3-year-old image within about 5 minutes!

Figure 1

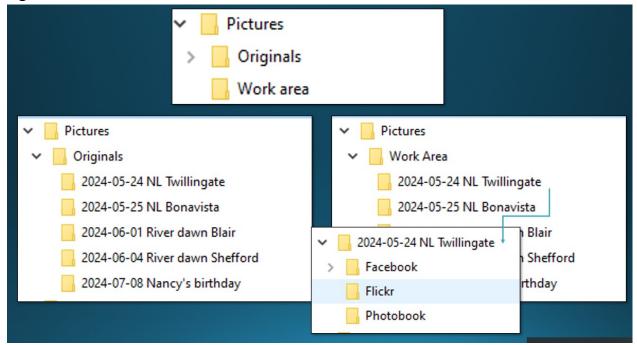
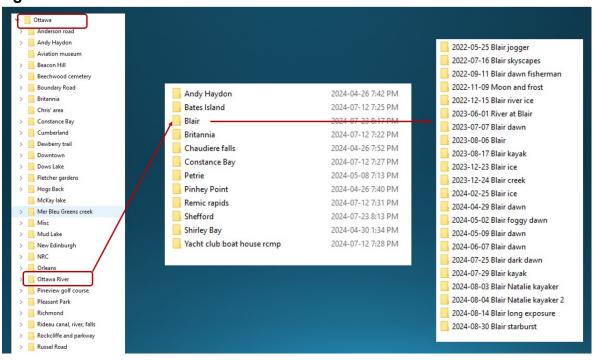


Figure 2





Organizing your photos - Part 2

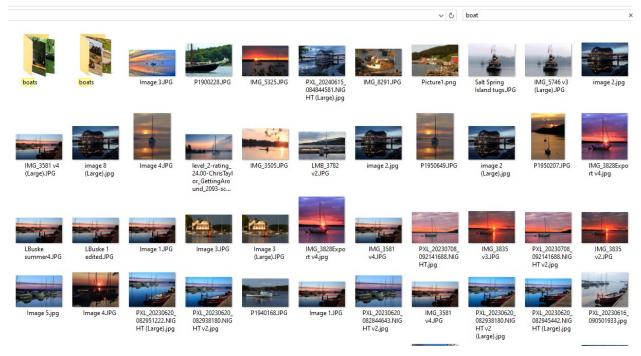
By Lynda Buske
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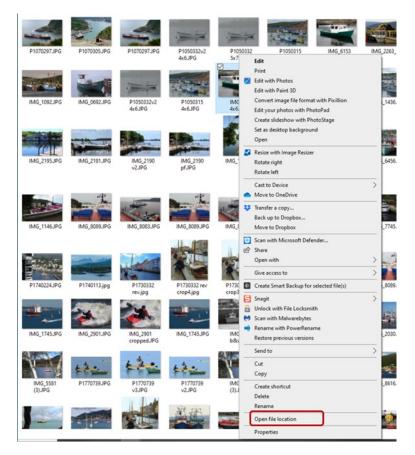
Last month, I wrote about using *File Explorer* to organize your photos on your PC: https://opcug.ca/ Photography/OrganizingPhotosPart1.pdf.

This month, I am going to show you how to find photos that you have not tagged or renamed and how to assign stars to your best ones.

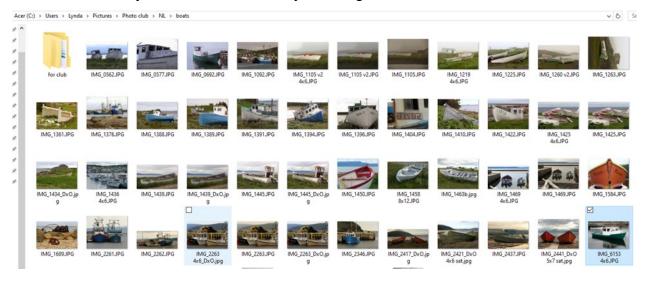
To search for an image using *File Explorer*, I first make sure I am in the *Pictures* folder (by default, Windows only indexes a few personal folders such as *Pictures*, *Documents*, *Downloads*, *Desktop*, etc.) and then I enter whatever text I want in the search box in the upper right corner. If I know the image name or number, I can certainly search for it here but most of the time I do not. Even with well-named folders, there are times when I don't remember when and where I took a photo if it is a common subject like a boat or a bird. Alternatively, I may wish to see all my images of a particular topic such as boats displayed together as a collection so I can then select the best one. Note that when I search on the word *Boat*, it also shows any folders or file names where the word boat is included, regardless of their content. If I named a photo of a rose as *Boat*, it would appear in the search results.



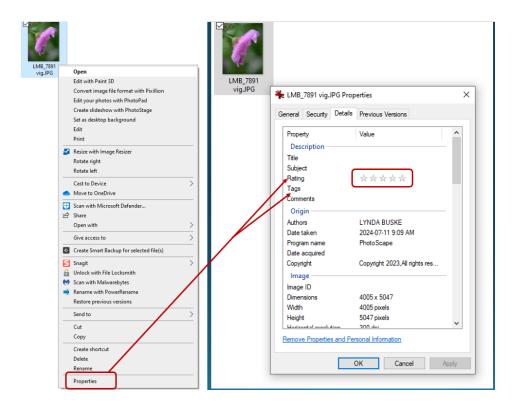
The more specific your search words are, the less likely the search will be successful so keep your terms broad. For instance, it will find *Birds* but not necessarily specific species. To find out where a particular file is located, right click on the photo and go to *Open file location*.



It will then show you the exact route to your image.



To tag an image or assign a star rating, right click on the photo and go to *Properties/Details*. From there you can click on the number of stars you wish to give it or type in a tag.



Later on, if you want to search by the number of stars, just put the word *Rating* in the search box and a star selection drop down list will appear. You can then select the number of stars and it will display only those photos where you have assigned that level of star rating.



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Quick Tip 70: Duplicating browser tabs

By Chris Taylor, President
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It can be handy to duplicate an existing browser tab. I often do this when I want to explore other areas of a website. Having the original tab available lets me quickly return to where I was before going on my spelunking adventure.

One way is to click in the address bar (which will select the current URL), press Ctrl+C to copy the URL to the clipboard, open a new tab, press Ctrl+V to paste the address from the clipboard, and finally hit enter to load the page.

A much easier way is to hover the mouse over the browser's *Refresh* icon and click the mouse wheel or the middle button if your mouse has one.



The current tab will be duplicated to the right of the current tab.

You can also use this technique on the browser's *Back*, *Forward*, and *Home* icons to load those pages into new tabs.



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Meetings start at 7:00 PM (9:00 AM on Saturday) unless otherwise noted. *Virtual Meetings during Covid pandemic.

November

11

October

Sun	Mon	TUES	WED	Тни	Fri	SAT
			1	2	3	4
5	6	7	8	9	10	11 Linux on Sat- urday SIG 9:00-Noon
12	13	14 7pm General Mtg Steam Deck 6pm Tech Topics	15	16	17	18 MS Office SIG (includes Access) 9:00-Noon
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8 Linux on Sat- urday SIG 9:00-Noon
9	10	1 1 7pm General Mtg TBD 6pm Tech Topics	12	13	14	15 MS Office SIG (includes Access) 9:00-Noon
16	17	18	19	20	21	22
23	24	25	26	27	2 8	29
30					Go to F	age 1



You have just read an issue of The Digital Viking.

Would you like to receive this delivered directly to your email or business each month?

As a member of TC/PC, the Twin Cities Personal Computer Group, one of the benefits is reading this monthly publication at www.tcpc.com..

As a member of TC/PC, you may attend any or all of the monthly Special Interest Group (SIG) meetings and be eligible for software drawings. The small membership fee also includes access to real-live people with answers via our helplines, discounts, and various other perks.

Does membership in this group sound like a good way to increase your computer knowledge?

It's easy to do! Simply fill in the form below and mail it to the address shown. (If you use the form in this issue, you will receive an extra month for joining now.)



Administrative Use Only Rec'd

10/25 I'm signing up for: Here's the info for my TC/PC Membership: O Individual/Family Membership (\$9) O Business Membership (\$100) If an existing member your # Make checks payable to: Company name **Twin Cities PC User Group** 341 County Rd C2 W Roseville, MN 55113 City State Zip Or sign up on our website: http://www.tcpc.com OHome OBusiness OChange address: OPerm. OTemp. 'til Home phone_____ Work phone____ O Check # O Bill me O New member O Renewal O Prior member Online address(es) I'm interested in: O Training classes O Volunteering Where did you hear about TC/PC? _____ O Special Interest Groups: New User, Access, O I DO NOT want any of my information disclosed. etc. O I DO NOT want to receive any mailings List here:

October 14, 2025

7:00 pm General Meeting

SteamDeck

Presenter: Jack Ungerleider

Via Zoom Only



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