

KEEP IT ORGANIZED

I am an inveterate collector. I have collections of all sorts of things, from fossils and minerals, to stamps and coins. Being interested in microscopy, I also have a collection of prepared slides to go with my collection of microscopes. Nothing historical or too fancy; many were bought individually from one of my suppliers or as boxed set commonly found on the market. Others were given to me from High School or University collections, often damaged, either with crystalizing mounding medium or some broken parts. Other slides I have made myself. All in all, I currently own well over 700 individual slides. I like (try?...) to keep them organized.

Everything is kept in 100 slide boxes which are stored standing up, like books on the shelf, so that the slides inside are flat and right side up. That's the way slides should be kept as the subjects inside can shift with time, slowly sliding due to gravity in the semi-liquid mounting medium. Each box contains one type of specimens: animal, arthropods, plants, mineral, microorganisms, and histology. What's inside is written on the box, and when more than one box is needed, a number is added (Plants 1, Plants 2, etc.). Each slide receives a number accordingly to its place in the box. They are identified with one or two letters, followed by a number. For instance, AR-90 identifies the 90th slide in a box of 100 ARthropods. P2-12 is the 12th slide in the second box of Plants. And so on. So as I work and several slides end up strewn on the desktop, it remains easy to return them to their proper place when the working session is over.



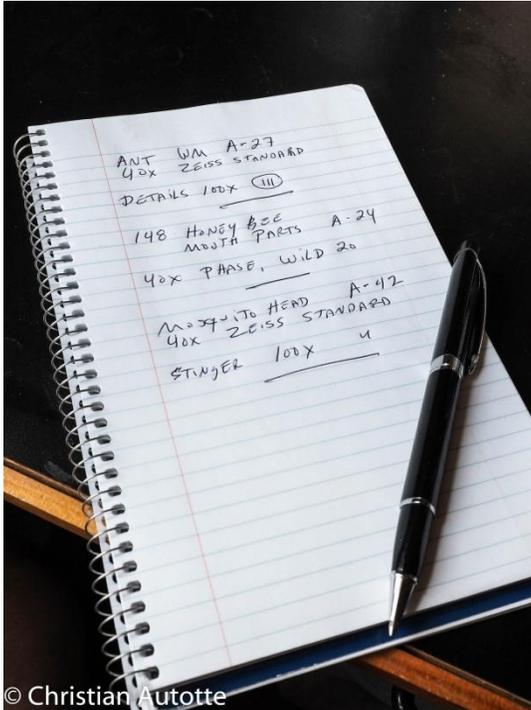
I currently own 11 microscopes, but a friend of mine may help me bring it down to an even 10...



Another advantage of this system is to keep tab on the slides I make myself. I have created an Excel file which includes the slide number, the subject, which box it is in, the mounting medium used, the mounting date, the preparations prior to mounting, the origin of the specimen, and miscellaneous notes. This is a great way to see which experiments succeeds and which do not. I am still learning the fine art of making permanent slides...

Those 9 boxes contain about 700 slides.

Of course, as new slides are added to the collection, they may not number enough to warrant a new dedicated box right away. So I have a “divers” temporary box where things spend a little time before finding their final home. I also do not write anything inside the boxes themselves, as homemade slides that develop too many problems may eventually get discarded. As for identifying the boxes themselves, I should have been more careful to keep all writings right side up... I also write down the content on the top lid of the boxes to tell which way is up; several of my boxes could be inadvertently opened upside down, making a mess of the slides.



© Christian Autotte

Keeping notes...

As a photographer, it makes sense that I photograph my slide collection; in fact, that’s one of the main reasons that I am interested in microscopy. And here again, having a specific number on each slide is a major advantage: I can easily tell which one is the subject of my picture. But that is not enough. As I have learned through experience, you often need to know more on about your picture, such as magnification or technique used. It is easy to lose track, especially if you take a lot of pictures before transferring them to the computer. I always keep a pen and notebook next to the microscope while I’m working. When taking pictures of slides from my collection, I start with the slide identification. This is skipped when working with live specimens; then I simply note what it is that I photograph (paramecium, algae, amoeba, etc.), or write a brief description if I cannot identify the subject. The provenance of the specimen will be added when everything is transferred in Lightroom or some other software.

Next is the magnification. At times, I may photograph through a 5x eyepiece instead of the standard 10x in order to get a wider field of view with the camera; this will also be noted. Since I have several microscopes, I may also indicate which one was used, particularly if I work with a standard microscope and switch the camera to a phase contrast unit. Not to be forgotten are any filter used, or special technique such as oblique lighting. In this day and age of digital cameras other things need not be noted: which camera was used, the ISO, shutter speed, etc., which are easily found in the exif of each picture. Yes, it can be tedious to write it all down, but in the long run, it can be a great learning experience, allowing learning from various mistakes or repeating any success. In the past, taking notes also allowed me to identify recurrent problems with certain pieces of equipment.

Let’s not stop here. If keeping a slide collection tidy is useful, the concept can easily be extended to the rest of the lab. As the old saying goes, “A place for everything and everything in its place”... Nothing is more frustrating than trying to find something that has been misplaced; it is wasteful of time that would be better spent looking through a microscope. I tend to be distracted and a bit of a lunatic, dropping things where it may be convenient at the time. So my glasses end up on various counters, desks, couch, shelves, etc.... and being near-sighted it’s always a lot of fun finding them again! After finding them *under* my boot (twice!), I try to be a bit more careful. The same goes with everything else in the lab. Microscopes optics and camera adapters have their own drawer. Slides and cover slide have another, as do mounting mediums, dissecting tools, colorant, reagents, etc. Keeping everything in its place makes it easier to find it in a timely fashion, whenever it is needed.

A noble principle we should all try to apply in our daily lives...

Comments to the author Christian Autotte welcomed, email: [cautotte.9001 AT videotron DOT ca](mailto:cautotte.9001@videotron.ca)
Published in the August 2019 issue of *Micscape* magazine.

www.micscape.org