

WHY NOT MOUNT IT DRY?

Some purists may object to what I am about to suggest, but then, I am not a purist...

I do permanent mounts of various subjects. While a lot of them are done quite traditionally with various mounting medium (some of which were suggested right here in Micscape), others look just fine when viewed dry, so that is the way I mount them. Yes, some may object and mention refractive index and so on, but the truth of the matter is that as an amateur, I just can't tell the difference, at least for some subjects.

But then, why mount them at all? First of all, it's to protect subjects that are inherently fragile, that can break easily, especially after a few months when they become desiccated. Any subject that is to be observed under the microscope must also be protected from dust; any speck becomes big as boulders when viewed at 100X, so imagine if the whole subject becomes covered with the stuff...

When dust settles in on something like feathers or butterfly wings, it becomes almost impossible to clean up.



By and large, what I tend to dry mount are insect wings, mostly butterflies and dragonflies, with some flies and bees, and various feathers. That kind of subject tends to trap a lot of air bubbles when mounted with most mounting medium. It's especially true of butterfly wings that are full of scales, or with large and rigid dragonfly wings. So instead of

trying my best to get rid of bubbles I simply place a cover slide on top of the wing (cut to proper size if need be), press it down with some weight, and spread a seam of glue all around. Pressing down on the cover slide not only keeps the subject as flat as possible, it also prevents the glue from creeping between the layers of glass. An excellent alternative to the weight is a small clamp of the proper size; it also keeps the cover slide in place while doing the gluing.



The ideal glue for such mounting remains epoxy: it is thick enough to remain on the edge of the cover glass without creeping between glass layers. It can easily be spread with a tooth pick. When ready to do some mounting, I lay out the subjects, the slide and cover glass. Then with the subject on the slide I cover it and keep the cover slide in place with the clamp. I prepare three or four specimens, and then mix the glue. Experience has thought me that I can usually mount three slides before the epoxy starts to harden so much as to become impossible to handle.

Even though the mounting is pretty straightforward, it doesn't mean that proper preparation isn't useful. Recent experience has thought me that feathers and insect wings can already be covered with dust or something worse, like bird lice, which can ruin a preparation. In some cases a quick dip in acetone or alcohol will be in order. When the subject is not to be mounted right away, I will normally keep them in alcohol; not only will it keep things dirt-free, it also disinfect it, preventing nasty surprises down the line. Simply place the subject on the slide for a few minutes and let it dry thoroughly before covering it.

While some people may think that making your own slide is a waste of time, I am of the opinion that it can be a great way to put away some preserves for later consumption! Living in a cold country, winter is a time where everything goes dormant, including microscopic subjects. That's when your preserves become handy. Revisiting the same subjects can be rewarding in many ways. At times you may find something that escaped you during the first examinations. And as a photographer, improvements in technology, software, and techniques, may also present opportunities to improve on previous work.

Not everyone will have the resources or the patience to mount subjects in various mounting mediums. But dry mounting is so easy that anyone could give it a try.



Mounted too quickly and carelessly, this slide shows a lot of dirt. A dip in acetone and more care in cleaning the slide could have prevented that.



Pigeon down feather. Those who think that feathers are boring should give them a second look under the microscope. 100x



Even at 400x, the dry mount gives me enough details to be happy with the picture. This is a stack of 6 shots of small fibres from down feather.

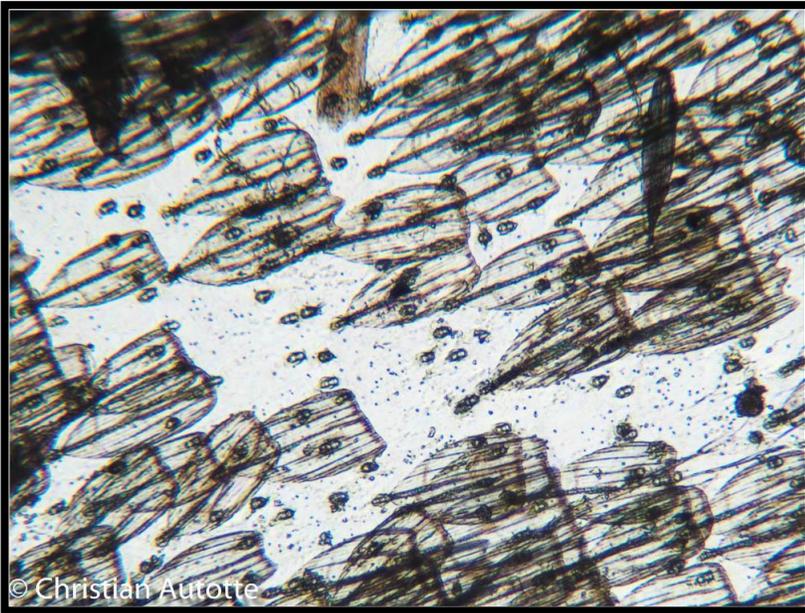


A stack of 11 shots shows details otherwise difficult to see in this South African dove feather. 100x.



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Garter Snake skin, 40x.



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Geometrid Moth, wing with missing scales, 40x.



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Geometrid Moth scale. Stack of 6 pictures at 400x.

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