

## GETTING READY TO GO CAMPING

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When I say camping, I mean traveling in an RV. When I find a good location, I like to stay there for a while and explore the area by taking nature hikes, bringing back samples to examine under the microscope. I have had many different microscopes and setups, which provided hours of fascination, but there was always something that needed improvement. My horseshoe type monocular microscope was great, but it was tedious and painful to look down into it. Having mostly wet mounts, I could not tilt it enough to make it comfortable. My other microscopes with binocular or trinocular heads are too heavy and large for traveling. So this is what I came up with:

I bought a generic microscope carrying case from Amscope.



I made a shelf to hold three drawers and on the bottom I fitted some wood blocks to prevent the microscope from moving while in transport. The drawers, I took out of an older parts cabinet. I gave no dimensions or assembly instruction because there is a large variety of microscopes and drawer types. This is just to give ideas on having a traveling lab in one handy case.

The microscope is an American Optical 150 which I described in previous articles. To make it smaller and lighter, I replaced the binocular head with a monocular head. I replaced the illumination with a battery powered LED. (Also described in a previous article.) I replaced the 100X oil immersion objective with a 20X objective, which is much more useful. In fact I did this to most of my microscopes. Having a monocular head is also very practical, because its so much lighter and smaller and its also much easier to share the microscope with others, especially children.

I noticed many AO microscopes of this type on eBay. Most of them are for parts only. This is how this one came together and it turned out to be an excellent microscope, very robust with very good optical qualities. A great companion on the road.

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