

Dealing With Nondescript Rocks

The Problem

There are a lot of nondescript rocks in this world, rocks that are generally fine grained, dark- or light colored, uniformly bland, or uniformly variable, without obvious distinguishing feature. Many of them show up in these web pages, where the best we can do is give you a picture that does not look like much, and often does not help you to know what the rock is.

For example, basalt, hornfels, serpentinite, soapstone, mudstones, and micrites can all come as fine grained, generally uniform, dark colored rocks. And these rocks cross the spectrum from igneous, to sedimentary to metamorphic, so we cannot always even drop them into a broad category to begin to narrow the possibilities down.

These kinds of often give novices fits. "If they all look alike how are we supposed to identify them!"

Good question for which there are not simple answers. These rocks often even give geologists pause. Oh, we may have a suspicion what the rock might be based on experience, but until we test it we just don't know.

The problem is compounded by the fact that many specific rock types themselves are not uniform in color or appearance. One thing is sure, unless you already have experience with a particular rock type the images provided here are often not going to help you

The Solution

Typically the first thing a geologist does when picking up a rock is to turn it over and around. We want to see light flashing off the various surfaces to judge the luster, and we want to get a feel for the heft of the rock. We are also gathering tactile information, is the rock hard and tough, or does it have a greasy or slippery feel. We might then get out a knife to see how hard the rock is, or test it with acid.

All of these are going to help us narrow down the possibilities. And usually what happens is that one of these features turns out to be diagnostic. Some property that only one or two kinds of rocks have - and with that we are able to identify it.

There are thus a few things than can be done to learn to identify nondescript rocks. The first is to have some idea of all the kinds of rocks that are typically nondescript. If you have a list in your head, or on paper, then there is a place to start.

Second, you have to know what properties are distinctive for each one of these rocks, and have had enough experience with them to recognize them on sight, or touch.

Third, you sometimes have to be able to eliminate all the possibilities that it cannot be. For example, if a rock reacts with acid, then we know it is not going to be igneous, and not most of the metamorphic rocks. It might, however, be micrite or marble, and at that point we have an excellent chance of deciding what it is.

The lesson is, don't get discouraged, get systematic.