

Field Testing **the Gold Bug 2**

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The original Fisher Gold Bug is probably the best known and one of the most successful nugget hunting metal detectors made. Now, Fisher Research Laboratory has introduced a second gold nugget hunting detector, the Gold Bug 2. Like the original Gold Bug, it is light, sensitive and easy to use. This new detector operates at a higher frequency than the Gold Bug (71.01 kHz) for better detection of smaller nuggets, has a very reliable Iron Disc Mode (iron/hot rock reject discrimination feature) and has a quick and simple 3-position Mineralization switch, which allows the operator to quickly adjust the detector to either difficult, normal or low mineralized soil conditions. The list of controls of the Gold Bug 2 include a Sensitivity/Battery test control, On/Off/Volume control, dual adjustable Ground Reject controls (a 25-position coarse adjust and a 16-tum fine adjust), two 3-position switches (a Mode switch which selects between iron discriminate, normal and audio boost, and the previously mentioned Mineralization switch for either High, Medium or Low soil mineralization) and a Threshold control located at the back of the control housing which sets the audio level heard when no target is present.

Powered by two 9-volt transistor batteries, the Gold Bug 2 comes equipped

with a 10-inch elliptical coil (optional coils include 6 1/2-inch and 14-inch models). Weighing in at approximately 3 pounds, the Gold Bug 2 is one of the lightest nugget hunting detectors available.

CONTROLLED TESTING

The Gold Bug 2 was one of the easiest detectors I have ever assembled. All I had to do was remove the two assembled halves of the detector from the box and slide the two shafts together. In less than a minute, I was ready to begin my controlled testing.

As with other gold hunting detectors, I began my testing of the Gold Bug 2 at home using several conventional buried targets (miscellaneous coins and pieces of lead), gold nuggets, hot rocks and different types of soil to simulate real-world conditions I have experienced in the field.

The Gold Bug 2 picked my buried 6 1/2-inch-deep dime and a 2 1/2-inch-deep nail with ease in all mineralized settings. Next, I checked both targets using the Iron Disc Mode (iron reject discrimination mode). The dime came through as a good target and the nail was rejected.

Next on the list of targets checked was a 9-inch-deep nickel and a couple of small pieces of lead buried between 3 and 4 inches. In the process of checking for the nickel, I discovered there

were a couple of very small pieces of aluminum foil buried near the nickel. This was a quick indication of how sensitive this detector was to really small non-ferrous objects.

After removing the unwelcome targets, I found I could detect the 9-inch-deep nickel and the pieces of lead in the conventional detecting mode. While the lead did indicate in the discriminate mode, the nickel did not. This really didn't really concern me since I am a firm believer of digging all deep weak targets.

The next form of testing included creating a worst case environment you might encounter while nugget hunting. This included a test plot having different types of mineralized soil and hot rocks and using differently sized gold nuggets as targets. The nugget sizes ranged from less than a grain in weight (about pin-head size) to one weighing about 30 grains (about half the size of a dime).

All nuggets were initially kept away from rocks and smallest nugget was on the surface, while the largest nugget was buried to a depth of about 3 inches. With the sensitivity control at maximum and switching through the three positions of the Mineralization switch, I was able to easily detect all targets, including the smallest with all settings. The normal position produced a somewhat



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sharper response due to the fast auto-tuning. The difficult soil setting also displayed a sharp response but with slight reduction in sensitivity.

The test was run again but this time with the Sensitivity control near the mid-position (between 5 and 6). Again, I could easily detect all nuggets. This reduction of the Sensitivity control displayed little depth loss but added the benefit of smoothing the somewhat raspy audio response present on some of the previous settings.

Testing the soil/hot rock combination displayed the advantage of the Normal and High positions of the Mineralization switch. In both modes, wide ground variations resulted in much less of a response than normally encountered, making it easier to distinguish a target from a false ground signal.

Next, I placed a hot rock over the larger nugget to see if I could detect it under the rock. I found I could easily detect the nugget if I had the ground balance adjusted so the rock was nulled.

The Iron Disc Mode was tested over all nuggets with no hot rocks nearby. All, including the smallest, gave a nice positive response. Next, I placed a hot rock over the 30 grain nugget and tried again. As I have found with other detectors, the strong response from the negative hot rock caused the small nugget to be ignored.

FIELD TESTING

The Gold Bug 2 was tested for several days in Arizona and produced one nice little 3-grain nugget. Unfortunately for me, I wasn't the one to find it.

As for myself, I found more than my share of the tiniest pieces of lead, whiskers of metal and small pieces of aluminum foil, as well as the usual large number of shoe tacks, nails, bullets, shell casings and other larger pieces of iron. Initially, I started out in one of my favorite hunting spots with the Gold Bug 2 set at Normal on the mineralization switch and varied

the sensitivity periodically between a setting of 6 and maximum. The detector displayed excellent sensitivity to really small targets and displayed very respectable ground stability.

Throughout the next several days of testing, I switched between normal and difficult ground modes depending on the conditions of the location and varied the sensitivity between 5 and maximum. I found if I switched to the Low mineralization setting and adjusted the detector as I do with all nugget-hunting detectors, nulling the most negative hot rock, I didn't have to make any adjustments to the ground balance control

“A higher frequency translates into more finds!”

when adjusting either the mineralization switch from Low to Normal or High or adjusting the sensitivity control.

I also found by running the detector on Normal or Difficult and the sensitivity at less than maximum, I could readily search with the coil almost scraping the ground, making small deep targets easier to hear.

One feature that was seldom used during the testing was the Audio Boost Mode. When it was on, it was almost too much signal gain for normal operations. However, in the search for a couple of really small targets, it did prove beneficial. Throughout the entire trip, I used the Iron Disc Mode to verify targets. The more I used it, the more confidence I had in this feature. I suspect that if I had been in an area just loaded with positive hot rocks, I would probably have searched slowly in this mode.

Near the end of the last day of field testing, everybody, including myself, was discouraged since it seemed gold was not to be found. While talking to a couple of

nugget hunting partners, Tony Pancake asked if he could try the detector again for a while.

Tony took the Gold Bug 2 to a nearby dirt bank that had been previously hunted by several people and in fewer than five minutes he had found a nugget. Quickly walking over to him, we saw the smile on his face as he was in the process of spitting out the small but beautiful piece of gold. On this day, Tony proved that when you combine luck, skill and a very sensitive detector, you can be successful.

CONCLUSION

This new detector displays the same light weight as the Gold Bug, but has some added features. Both have excellent sensitivity, especially to really small gold nuggets. However, the new features of Iron Reject Discrimination and Mineralization switch greatly enhance the versatility and ease of use of this detector.

I suspect this new detector will have the same success as the original Gold Bug. I heartily recommend this detector to anyone wanting a extremely sensitive detector capable of finding the tiniest of nuggets as well as the larger and deeper ones.