

NORWAY DETECTORIST! By Allan Holden all rights reserved

Here is a something that I posted on a Minelab Explorer Forum. I hope it will be of help to my fellow club members.

Bjorn Fodne's question was, "*Has anyone else noticed that they make better and deeper finds after sunset? Or is it just me?*" After Bjorn contacted me, I posted this answer on the forum.

FINDS AFTER SUNSET?

Hi, guys! My good friend, Patrick Goraj, directed Bjorn Fodnes my way with a question regarding his Minelab Explorer. Bjorn is experiencing something that is related to sunspot activity and the fact that his metal detector, like all metal detectors, is radio technology.

"Your detector is a close cousin to those two way radios, like CB's and Ham Radios. Both your detector, and these instruments, transmits and receives radio signals. Like a radio has, your search coil is really an antenna.

Sunspot activity plays heck with anyone trying to use CB radios. This phenomenon causes a disturbance in the atmosphere, which bends and distorts radio waves in an unbelievable fashion! On a CB radio with very limited power (usually only 4 watts), you could be in Michigan trying to talk with your friend across town, but instead you are hearing some station from south Texas, over 2000 miles away, covering your friend up. As they say in CB slang, "He walked all over your friend, good buddy!" Usually there is so much clutter in the form of atmospheric mumble jumble during a sunny summer day on a CB that you may as well leave it turned off. But come sunset, the radio clears up and you can hear stations clearly again.

This bending of the radio waves in the atmosphere can and does cause interference to our metal detectors. Sometimes we only recognize interference when it stands out in the form of chatter in our headphones or strange activity on our screens. When this is the case, we lower our sensitivity to a level that causes our detector to quiet-down, or stabilize. This does not always solve the problem because what we were hearing and seeing, is like spill-over from a glass that is too full! Too full of interference that is! So much interference that it is spilling over! When the sensitivity is lowered just enough to quiet the detector, it still can contain a high level of interference we just don't hear and see it.

I wrote an article back when the transmitter Receiver detectors were the state-of-the-art machines. The article was titled, "Reading a Site" it covered deciding the amount of discrimination to use, where to begin searching, and most important deciding how much sensitivity to run. In the part regarding adjusting sensitivity, I had the detector user turning his sensitivity up to high, then with the coil held out away from you at around waist level, slowly turn until you locate any and all directions causing interference. But, continue until you locate the direction from which you are getting the 'very worse' interference. While you point your coil in that direction, lower the sensitivity until your detector stabilizes, then (and here is the trick) lower your sensitivity another 1/4 turn!

When a detector is loaded up with interference, targets that don't have the advantage of possessing a corrosion induced halo like you get from copper coins, are going to be a weak target and hard to be seen or acknowledged by an unstable detector. This is one reason most hunters clean up on pennies but very rarely find old, deep, small silver.

You are going to have a harder time contending with interference when using a multi frequency detector for two reasons. By having several frequencies you are more likely to find interference sources that will match one of the frequencies that your detector receives. Also, number two, in order for a multi frequency detector to be able to receive so many different harmonic frequencies the coil must be unshielded which adds to the interference problems. Not every sunny day is going to make detecting harder it depends on all these factors including sun spot activity. The CB and Ham radio operators will tell you that there are good days and bad days and even 'good years' and 'bad years!'

Just like your car radio, which starts working like a champ on distant stations after sunset, so will your detector on distant coins when the atmosphere is a problem. Cloud cover often acts as a filter and can help as well. . . as long as there is no lightning in the area.

Yes! Lightning and its charging effect on target's halos! Now, there is another interesting subject for another time! Hope this helps.....