

Choosing the Right Detector

by Don Hinks

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For over 35 years I have been a supplier of quality metal detectors at my store in downtown historic Gettysburg. Since 1972, I have sold more than 8000 metal detectors to satisfied customers, one at a time, personally instructing them in the proper use of the detector that they have chosen. Since the late 1960's I have been an avid detectorist myself, using everything from the primitive heavy tube type instruments to the lightweight state-of-the-art computerized discriminating detectors of today.

For these last 35 years, I have strived to assist each customer in making the right decision when he or she chooses the best detector for their specific use and price range. With our large selection of new metal detectors on display, it can be bewildering to the first time user. To help the customer make the right choice, I first ask the customer what they plan to primarily use the detector for, and where will they be using it. No one specific model of a detector will excel in every situation.

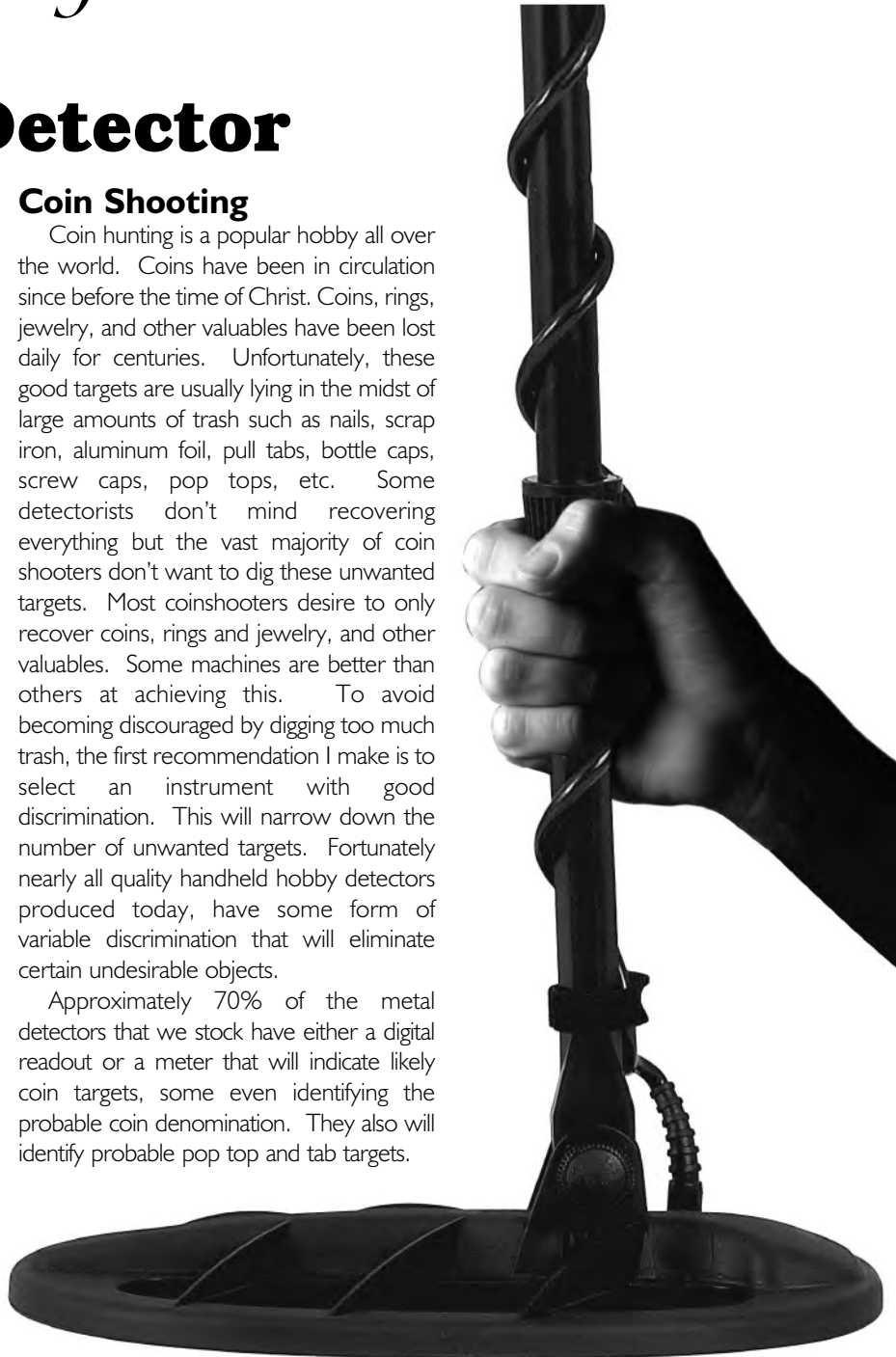
Customers come into the store seeking detectors for many purposes. The most popular uses are for coin shooting, relics, jewelry (beach) and gold prospecting. Some other uses include scuba diving and cache hunting. Commercial and industrial uses occur as well, such as security (walk thru and hand held wands), surveyor (locating property stakes) and utility use for locating buried pipes or cables. Knowing the primary use of the detector determines what detector is best suited to fill their needs. There is no "one detector fits all."

In this article I will focus on coin shooting, relic and beach hunting, and prospecting. The ideal instrument for each of these types of detecting is different from the others as you will see.

Coin Shooting

Coin hunting is a popular hobby all over the world. Coins have been in circulation since before the time of Christ. Coins, rings, jewelry, and other valuables have been lost daily for centuries. Unfortunately, these good targets are usually lying in the midst of large amounts of trash such as nails, scrap iron, aluminum foil, pull tabs, bottle caps, screw caps, pop tops, etc. Some detectorists don't mind recovering everything but the vast majority of coin shooters don't want to dig these unwanted targets. Most coinshooters desire to only recover coins, rings and jewelry, and other valuables. Some machines are better than others at achieving this. To avoid becoming discouraged by digging too much trash, the first recommendation I make is to select an instrument with good discrimination. This will narrow down the number of unwanted targets. Fortunately nearly all quality handheld hobby detectors produced today, have some form of variable discrimination that will eliminate certain undesirable objects.

Approximately 70% of the metal detectors that we stock have either a digital readout or a meter that will indicate likely coin targets, some even identifying the probable coin denomination. They also will identify probable pop top and tab targets.



This is known as "target identification" or "target ID"

Some discriminating detectors do not have a digital readout or meter to help identify targets. This type of machine usually has a linear type of discrimination adjustment that selectively eliminates targets as you increase the control.

Typically this linear setting first deletes iron, then foil, and so on up the scale of targets. The danger in increasing the level of discrimination to eliminate pull tabs is that at that level of discrimination many gold rings could be eliminated, and unless the instrument features dual discrimination or some type of notch discrimination, nickels and numerous other rings could be lost as

well. Unless pull tabs are excessive, I recommend digging them especially if there is a chance of there being gold rings or jewelry in the area.

In summary, for coin shooting I recommend an instrument with good discrimination that can effectively identify a large portion of worthless junk in the ground. Although some successful coin shooters use discriminating instruments without target ID, I recommend that if it is within your price range, or even a little higher than you had planned, purchase a unit with a digital readout or a meter. Consider at some point, buying a second, smaller coil, for use in hunting trashy areas. Smaller coils have better separation and work well in trashy areas.

Recommended Coin Shooting Fisher Metal Detectors: *F75**, *F70**, *F5**, *F4**, *F2*, *CZ-3D**.

***Highly Recommended**

Relic Hunting

Being located in historic Gettysburg, PA, many of my customers are interested mainly in hunting Civil War relics. The use of metal detectors on National Park Service property is strictly prohibited anywhere in the United States, including the Gettysburg National Military Park. The use of detectors outside the NPS property is proper only with the permission of the property owner. The area around Gettysburg is dotted with many sites used as camping areas, hospital sites, battle, skirmish, and winter camp sites, not to mention all the roads traveling to and from these areas. With proper research and permission to hunt, these areas can be productive.

The needs of the relic hunter are different than the needs of the typical coin shooter. For the relic hunter, the three most important factors are depth, depth and more depth. The depth capability of a machine is always important but even more so if you wish to be a serious relic hunter. Revolutionary War, Civil War, and War of 1812 artifacts, as a general rule, are usually much deeper than modern coins and quite often found in rough terrain such as woods, overgrown

areas, croplands and pastures. Artifacts in plowed fields can be quite deep. Unexploded artillery shells can be several feet deep. Additionally, well known sites may have been detected for years and years, leaving only the very deepest targets remaining. If your machine can't detect a small target 10" deep, you may not recover anything.

While the coin shooter normally discriminates against all types of iron, most relic hunters desire iron objects. These can be cannonballs, artillery shells, bayonets, gun tools, weapons, as well as non ferrous bullets, buttons, buckles, spurs, etc. Discrimination and target identification are a plus in relic hunting but are not a necessity. Some of the finest and deepest relic hunting detectors do not have target ID. Because depth is important, you must have a machine that can cancel out ground mineralization with manual adjustments. Avoid machines that have factory preset ground balance because ground conditions can vary widely

detector they are very difficult to find.

Beach hunting can be done on the dry sand or out in the water where many rings are lost. Salt water beaches present special problems (mineralization) and you must determine if you will only shallow wade (with just the coil under water) or desire a totally submersible machine suitable for deep water wading or diving. All quality metal detectors have submersible search coils but not all control boxes are waterproof or suitable for the pressures of deep water diving.

In all types of beach hunting, the discrimination must be kept very low, eliminating only small iron (bobby pins and nails). Aluminum pull tabs and tin foil should not be discriminated or you will lose some gold and/or platinum rings as well. Some beach hunters operate with zero discrimination and dig everything. Use of a sand scoop will make target recovery fast and easy.

If you only plan on hunting dry sand and very shallow water a good coin shooting

The depth capabilities of a detector are always one important factor whether a person is coinshooting, relic hunting, beach hunting, or prospecting.

and you will need a machine that you can adjust to these various conditions.

In summary, serious relic hunters should consider purchasing the deepest instrument in their price range. Target identification is nice but not necessary. Get a machine with a manual ground balance adjustment. Use headphones to help hear deep targets and get the largest coil available to get maximum depth.

Recommended Relic Hunting Fisher Metal Detectors: *F75**, *F70**, *F5**, *F4*, *F2*, *CZ-3D*, *1270X**.

***Highly Recommended**

Beach Hunting

Beach hunters are typically looking for modern jewelry and coins, although some beaches can yield historic artifacts as well. Items dropped in the sand quickly disappear and without the aid of a metal

detector will work well if you keep the discrimination set low. If you wish to go out into deeper water you will need a totally submersible machine. Some machines have a single tone for all targets and some have variable tones for different targets. It's important to realize that most gold rings will read in the "middle" tones (above iron but below coins). An exception to this type of machine is the Pulse Induction (PI) which operates on totally different principles than most detectors, and these machines have little or no discrimination capabilities. All of these machines will work well in fresh water but salt water is a different story.

Wet salt makes the ground conductive. All metal detectors work well in the dry ocean sand but most single frequency detectors become erratic in the wet salt sand or in the surf. The detector sees the

sand as a large sheet of metal. In order to operate in those areas with most single frequency instruments, you must decrease the sensitivity of the instrument and it may still operate erratically. If you only occasionally visit the ocean and own an instrument that becomes erratic in wet salt sand, you can still operate perfectly in the dry sand area. If you live near the ocean, or get to the ocean frequently, you should consider investing in an instrument that will operate well in all conditions including wet salt sand. Multi frequency machines handle salt conditions well as do Pulse Induction machines. Metal detectors that operate well in salt water are generally higher priced than multipurpose detectors, but they are definitely worth the extra investment if you frequent the ocean.

In summary, keep your discrimination levels low, tonal ID gives you an advantage, and purchase a fully submersible machine if you wish to hunt deeper water. If you plan on hunting salt water areas often invest in a machine designed for those conditions.

Recommended Beach Hunting Fisher Metal Detectors: F75, F70, F5*, F4, F2, CZ-3D*, CZ-21, 1280X*.**

***Highly Recommended for salt water/wet sand**

***Completely Submersible**

Prospecting

Fine gold and flakes are not detectable with a metal detector but nuggets (even some smaller than a BB) are detectable with the right type of metal detector. Nearly any machine will find a nugget if it is large enough, not too deep and not in highly mineralized soil. Every major manufacturer of metal detectors makes an instrument designed specifically for prospecting. If you are serious about detecting for gold you should consider purchasing one of these instruments. Units for prospecting normally operate at a higher frequency than most detectors because gold responds better to the higher frequencies. Gold is also commonly found in extremely mineralized ground called black sand. To detect gold effectively in these extreme conditions you need a machine that can balance out the high mineralization and maintain stability with a smooth threshold tone. Otherwise, small nuggets will not be detectable. In addition, special coil types are used on gold machines that enable the machine to cancel out the affects of the black sand. Pulse Induction machines also work well for gold hunting.

In summary, if you are really serious about prospecting with a metal detector you should consider purchasing an instrument designed specifically for that purpose. Your success rate will be much higher if you do. Extreme conditions



warrant a machine that can handle them.
Recommended Prospecting Fisher Metal Detectors: F75*, F70, F5, Gold Bug 2*.
***Highly Recommended**

I have discussed factors that you should consider as you choose a detector for your needs whether it be coin shooting, relic hunting, beach hunting, or prospecting. As noted before, there is no such thing as "one detector fits all." If you are now considering choosing a detector for one of these conditions consider the suggestions I have made and buy from a reputable dealer, preferably one within driving distance. This should be a dealer that not only sells detectors, but also uses them, and knows how to demonstrate proper use of each machine. Such a dealer will help you pick the best machine for your budget and your style of hunting.

Thumbs up to the Fisher F75!



Eddie M. Detectorist

My first time out with the F75 was a very pleasant surprise. It was even more user friendly than I could have ever imagined.

I choose a spot I had given up on. After briefly reading the manual, learning how to ground balance with the coil pumping procedure, I decided

to keep the other settings as close to factory presets as possible. Right off I loved how easy to swing and well balanced the F75 was. All my signals were deep probably because the area had been hunted so

hard previously. A few hours into the hunt I had a nice repeatable signal, but very faint. After digging a deep hole in the sandy soil, I hit the clay bottom; putting the coil in the hole I got a less faint signal. Using my shovel, I carefully picked out a chunk of the



clay. Opening the clay I saw I was the proud new owner of a cuff Virginia staff button with at least 95% gilt left; this small button was approximately 18" deep.... wow! A few feet away, out pops a silver 3 cent piece around 10" deep. I found a few other deep period relics in my short first outing with a brand new detector.

All I have to say is that the F75 is truly a work of art!

Eddie M.