





The world of metal detecting is fascinating. As a detectorist, one of the essential skills you should strive to master is target identification and accurate recovery. The ability to distinguish interesting finds from less interesting items and efficiently recover targets is key to your success. In this comprehensive guide we will explore the techniques and strategies that will enhance your target identification prowess and improve your recovery rate. So, let's dive in and unlock the secrets of successful metal detecting!

# Understanding Target Signals

To become proficient in target identification, it's crucial to understand and interpret the signals emitted by your metal detector, and the discrimination settings it provides. These signals provide valuable clues about the nature of the target beneath the ground. Take time to learn your metal detector's audio cues and understand how they correlate to different types of targets. With practice, you'll develop an intuitive sense of distinguishing between promising finds and unwanted metallic debris, and with some machines, you can also get an idea of the depth/size of the item too! Don't forget though, no detector can tell you exactly what you have found before you have dug it up. Your detector can give you the clues to finding nice targets, but you have to put the spade in the ground to find out what it is exactly.

## Sweeping & Target Recovery Techniques

Proper swing (correction sweep) technique is essential for covering ground efficiently and increasing your chances of detecting targets.

Maintain a steady, controlled sweep and overlap your sweeps to ensure thorough coverage, a good method is to imagine the armrest of your detector is attached to your hip, that way you scribe an arc rather than pendulum a swing, you won't find much detecting fresh air. Lastly, keep that coil flat or parallel to the ground, an angled coil is inefficient.



Once you've identified a potential target, the next step is to recover it from the ground without causing damage. Never dig on top of a target to help prevent damage, always enter the ground from the side. The 'Plug' technique is popular, in which people will often dig a plug out of the ground around a target, recover it with the help of a pin pointer, then place the plug back in the hole it came from so you leave almost no trace.

Also, check which type of coil design you are using. Is it 2D (DD) or concentric, as there are very different techniques for each. For a DD coil, bringing the coil to a small shuffle over the target is a bad idea. This can cause the detector to indicate the target is in a slightly different location than you think! Instead, pass the entire coil over the target each time. This way, the signal will only sound when the centre of the coil has passed the target, giving you more accuracy in locating your target.

For a concentric coil, you can come to a small shuffle over the target and you will not lose accuracy. For more precise pinpointing with a concentric coil, raise the coil from the ground while you shuffle above the target. Concentric coils penetrate the ground in a cone shape, coming to a tip. Use the tip of your detection range to zone in on the target, and you won't have to dig larger holes!

You might want to also consider a pinpoint probe, as mentioned above. These can help you target precise locations of a target within a search area after the initial dig. Take time to practise pinpointing until you can confidently mark the spot where the target lies.

When it comes to excavation, different targets may require different digging techniques. For shallow targets, a small hand trowel might be sufficient. However, deeper targets may call for a longer spade. Always dig carefully around the target area and use tools appropriate for the soil conditions to minimise any potential damage to your finds and the surrounding area.

## Identifying Common Targets

Understanding the characteristics of common targets is essential for successful metal detecting. Let's explore a few categories:

- **Coins**

These are common desired targets for detectorists. Different types of coins, from modern currency to historical coins, emit different signals. Become familiar with the signals and characteristics of various coin types to increase your chances of unearthing these little snapshots of history. A little research into the type of metal used in coinage through the years will pay dividends and also watch out for later 'clad' coins.

- **Relics**

Relics offer a glimpse into the past and can range from buttons and buckles to ammunition and other artefacts. Each relic has its own unique features and signals. Study historical artefacts and learn to identify their distinguishing traits to better prepare yourself for future hunts. You can use the relics you find to give a rough indication of the time when the land was used, and may lead you to more artifacts of a similar age or style.

- **Jewellery**

Discovering a piece of jewellery while metal detecting will always put a smile on your face. Rings, earrings, necklaces, and bracelets all emit different signals based on their composition and size. Pay attention to the target signals associated with jewellery and learn to differentiate them from other types of finds.

## Advanced Target Identification

As you gain experience in metal detecting, you may want to delve into more advanced target identification techniques. Consider the following:

- **Non-Ferrous vs Ferrous Targets**

Understanding the difference between non-ferrous and ferrous targets is crucial. Non-ferrous targets, such as gold or silver, produce different signals than ferrous targets like iron. By learning to recognise the distinct signals of each, you can improve your target discrimination and focus on the more interesting finds.

- **Depth Estimation**

Estimating the depth of a target can help prioritise your recovery efforts. By assessing the signal strength and other factors, you can gauge how deep the target is buried. This information allows you to plan your excavation more effectively and saves you from unnecessary digging. Be aware that a large deep target can sound similar to a small surface target, a good way to see if it's near the surface whilst detecting cultivated farmland is to scuff the surface with a foot to see if the target moves. If using a DD coil, you can also get a double beep when going over a target on the surface- these targets can usually be seen or recovered without a shovel at all.

- **Target Imaging Technologies**

Some so called advanced metal detectors offer features like target imaging or spectrography, which provide visual representations of the targets. These technologies can help you better understand the composition and shape of the targets, making identification easier. We have yet to see one that works effectively for ourselves, so while the technology and innovation is exciting, I'd hold off from anything that promises target imaging for now.

## Strategies for Difficult Targets

Occasionally, you may encounter challenging targets that require specialised techniques to successfully recover. Here are some strategies to overcome common difficulties:

- **Iron Masking**

Iron masking occurs when the presence of a ferrous material interferes with your metal detector's signals as it's located very close to a good target. A good way to tell if this is the case would be to change your sweep direction and move around the clock (no more than 180 degrees otherwise you are duplicating) If the ferrous object is detected before the non ferrous object it may mask or ignore the good target, changing direction will change the audio information you receive and help you winkle out the good amongst the bad.

- **Small or Thin Targets**

Detecting and recovering small or thin targets, such as small natural gold or delicate jewellery, can be quite demanding. Utilise fine-tuning techniques on your metal detector and consider using smaller search coils to increase your chances of finding these items, also be aware that the metal part of the jewellery isn't always silver or gold, it may be platinum or even tungsten.

- **Trash to Treasure**

Sometimes, the most exciting targets may be hidden amidst a sea of unwanted rubbish and modern debris. By fine-tuning your discrimination settings and slowing your sweep speed in conjunction with employing patience and persistence you can successfully separate the wheat from the chaff and uncover hidden gems. The harder it is to work in these areas the more productive they can be as others will give up before finding anything.

By understanding target signals, mastering recovery techniques for metal detecting, and becoming familiar with common targets, you are now well-equipped for any metal detecting trips or rallies. Remember to follow local laws and regulations, obtain permissions where necessary and respect the environments where you explore, fill your holes & happy hunting!



