Finding Treasure Made Easy

A beginner’s guide to Metal Detecting

Author David Humphries at Metal Detecting Tips

It started with a quarter...Seriously 25 cents. We were on a family camping trip 11 years ago. My 9-year-old son brought along his Christmas present, a Garrett Ace 250.

We live in Michigan; the winters are cold and the ground is HARD as in frozen. So, by the time the camping season came around my son had nearly forgotten about the 250.

Michigan is blessed with campgrounds along our beautiful lakes. I woke up early, made some coffee and wandered over to the beach with the detector.

Treasure Fever...Money from Heaven!

This guide is intended for the beginner, if you’re an experienced detectorist you can stop here and delete this PDF. Only folks starting the treasure hunting journey are allowed. 👍
My Promise: I’m going to make treasure hunting with a metal detector – successful, fast, easy, fun and hopefully save you some money.

(Don’t worry you’re going to find some treasure. $ $$)

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A Couple Questions to Help

Before we dig into this (get it dig 😊) ask yourself these questions:

1. Why are you getting into this hobby?
   a. Find historic relics.
   b. Find coins, jewelry and other goodies.
   c. Find gold (as in nuggets)

2. Where will you be doing most of your searching?
   a. Close to home
   b. Traveling long distances

Your answers will help me point you towards the equipment that will make you successful.

This guide is going to help folks looking for money close to home, we call this being a coin shooter. But for those people traveling long distances looking for relics – go here.

Metal detecting for Gold requires expensive specialized equipment, but I’ve got you covered by going – here.
How Do Metal Detectors Work?

A metal detector transmits magnetic energy into the ground. This magnetic energy is sent from a coil of wire known as the transmitter coil. When you power on your metal detector, its batteries send electricity flowing through this coil of wire.

When your search coil moves over a metal item, the magnetic field is disturbed. This distortion is sensed by a second coil of wire in your detector’s search coil which is known as a receiving coil. The closer you move the search coil to the metal object, the stronger the magnetic disruption which outputs a stronger signal from your detector’s speaker.

This illustration shows how the magnetic field is disturbed and signals back to receiving coils inside the search coil.

There are two characteristics of metals that help your detector identify what it has found.

- **Ferrous** which in its simplest definition means the metal is magnetic and contains iron and steel.
• Non-ferrous (non-magnetic) metals that reflect your detector’s energy back toward the search coil. Pure silver is the most conductive non-ferrous metal and provides a strong signal on a detector.

Tools and Terminology of the Treasure Hunting Trade

The Basic Tools

A decent metal detector – if you can get a machine in the $200 to $300 dollar range. Metal detectors can easily cost $1500 but you don’t need to spend that kind of money in the beginning. The $200 to $300 price range will get the advanced features without breaking the bank.

**Metal Detecting Tip:** The major metal detector brands have nuances that are learned by the detectorist. Sounds, patterns and machine settings and labels. Odds are once you pick a brand you may stick with the same brand if you upgrade. For this reason, Bounty Hunter isn’t in the list. They don’t sell that “next level” metal detector.

Three Recommended Machines Under $300

• Garrett Ace 300 – Proven, reliable and a great value. Check the reviews and prices on Amazon with this link – [Garrett Ace 300](https://www.amazon.com/Garrett-Ace-300-Metal-Portable/dp/B0032H5U5G)
• Minelab Vanquish 440 – Accurate and easy to use. The Vanquish comes with a double D coil and you get to learn how Minelab machines work. (prepping for a future upgrade) Prices and reviews with this link to Amazon. [Minelab Vanquish 440](https://www.amazon.com/Minelab-Vanquish-440-Metal-Detector/dp/B0032H5X5K)
• Nokta Makro Simplex – Standard features include – completely waterproof and simple single screen setup. Another good thing, if you’re considering going wireless for a little bit more this machine ditches the wires. Amazon prices and reviews with this link. [Nokta Makro Simplex](https://www.amazon.com/Nokta-Makro-Simplex-Metal-Machine/dp/B0032H5X5K)
**Metal Detecting Accessories**

**Pin-Pointer** these little hand-held metal detectors are a game changer. When I first started, I would dig up a hole with a likely find and grab handfuls of dirt and pass it over the metal detector coil to see if I grabbed the right handful of dirt.

With a pin pointer I was able to quickly search in the hole and then in the dirt pile. I easily double my speed searching. Get a pin pointer if you don’t have one.

If on a budget – **KUMAN Pin Pointer** is good. Under $25 bucks, a great rating and that fast delivery. Link to [Kuman Pin-Pointer](#)

Spending a little bit more – **Garrett Pro-Pointer AT** is over $100, but worth it, waterproof to 20 feet and you can “tune” it to the soil mineralization levels. The progressive feedback (vibration and sound) quickly tells you where your find is and how deep. Link to [Garrett Pro-Pointer AT](#)

**Dedicated hand trowel** for about $15 you can get a trowel that will last a lifetime. Plus, you can use it in the garden. Recommendation [Garrett Edge Digger](#) - Link

If you beach hunt – sand/gravel scoop, more below.

**Decent gloves**, you’re going to wear them out quickly, but protect your fingers. Lots of time treasure is mixed in with broken glass.
Pouch, I used a cheap cloth handy man pouch for years. The biggest problem was it would fill with dirt. Most dedicated metal detecting pouches have holes or screens to reduce dirt accumulation.

Great attitude, like any new hobby embrace learning. Having a fun upbeat attitude will give you more patience to keep going.

That’s it – with around $300 dollars you can have a first-rate beginner setup

**Terminology**

Detectorist – that’s you! If you use a metal detector you’ve got a new label.

Double D Coil – is a coil with two overlapping wire windings in the shape of two D’s

Discrimination - is a metal detector’s ability to identify buried targets based on conductive and/or ferrous properties.
Frequency - One of the main characteristics that determines how well targets can be detected. Generally, a single frequency detector that transmits at a high frequency will be more sensitive to small targets and a single frequency detector that transmits at low frequencies will give more depth on large targets.

Find - is the object discovered metal detecting. Coins, jewelry, gold and trash are called finds. Until you the “detectorist” identify the object it’s a find.

Ground Balance - is a variable setting that increases detection depth in mineralized ground. Four ways that ground balance can be set.

- Pre-set – manufacture sets balance to a “general” condition
- Manual – operator sets balance
- Automatic – machine sets balance
- Tracking – changes automatically with the ground variation

Ground Mineralization - refers to the naturally occurring minerals in the ground that affect a metal detector’s performance.

Pulse Induction (PI) - is a type of metal detecting technology. Pulse induction operates by sending short pulses of voltage to the metal detectors coil.
Search Coil (Loop) - is the circular or elliptical plate that is swept above the ground during detecting

Sensitivity - refers to how responsive a metal detector is to small or deep targets.

Target ID (TID) – are numbers or audio tones produced by a metal detector to enable you to identify targets based on their conductive and/or ferrous properties.

Very Low Frequency (VLF) - VLF metal detectors create an electromagnetic field that is applied to the ground in a continuous sine wave.

**Metal Detecting Strategies That Work!!**

Below are 8 metal detecting tips that made all the difference for me.

1. I’m one of those guys that skips reading the manual for anything. Don’t just stick the batteries in your machine and head out. It will lead to frustration. – Take 10 minutes and READ THE MANUAL for your metal detector.

2. Practice scanning items. Learn the sounds and settings early on your detectorist journey. Grab some change (silver and clad), nickels, pennies, nails, jewelry, iron, bottle caps, aluminum foil, GOLD RING and pull tabs. Wave each in front of the coil and listen to the sound created and look at the read-out screen.

3. **Slow, Low and Level**, swing the coil as close to the ground as possible. The reason many metal detector manufactures sell coil covers is to protect the
coil from being worn down. Learn to over-lap the coil during a sweep.

4. Use fresh batteries – the power in those batteries is what is sending an electromagnetic field into the ground. **Strong alkaline batteries = more treasure.** If your detector uses a USB rechargeable battery, get a “power pack”. A life saver 😊.

5. Every time you turn on your machine review the settings closely. Many times, I’ve scanned a field for a half hour and looked at my settings and noticed I had bumped a button.

6. The art of pin-pointing. I struggled with this, I would hear a tone and during the excitement move the coil to quickly and without intent. Now, I hear a beep, shift 90 degrees and scan again. Nailing the location!
7. Go searching after a rain. As explained above, your detector senses changes in the emitted electro-magnetic field. Wet ground enhances the conducting qualities, increasing the sensitivity. Added bonus – damp ground is easier to dig.

8. Use all metal mode. When starting out, the process of hearing something, pin-pointing, digging and finding is the best practice. Once you get the fundamentals figured out, discriminating and isolating different targets will be much easier.

Where to Find Treasure!

The simplest strategy is to go where others have been. The more people, the better the odds. If you’ve ever hiked in the woods and found an old home foundation you’ve found a gold mine! In the past, folks didn’t have good lighting, window glass was expensive which in turn made finding a dropped item nearly impossible. That struggle in the past was your gift today.

- Start in your backyard, everyone says this and it doesn’t sound like fun, but loose change is being lost all the time. If you didn’t know you lost it, you would never look. NOW is the time to recover some of your own money.
- Parks, but I’ll add a twist. Large trees were yester-years picnic spots. Folks lying around on a blanket is a recipe for finding treasure.
- Bleachers are one of my favorites. Sitting for hours on a bleacher watching an event makes me squirm. Pockets loose stuff and detectorists find it.
- Beaches and swimming holes, think about where folks are changing clothes and you’ll find spots with coins. A local beach has changing rooms that are surrounded with sand. Folks are carrying clothes which leads to dropped money. Another beach I know, has stairs leading to the beach, folks are tipping over wagons and coolers and money is spilled...
- Fairgrounds and sporting events, yes obvious, but my biggest money day was at an old field that had an event 16 years ago!
- MY SECERT SPOT! Boat and canoe launches. If your detector is waterproof (most coils are waterproof) folks are falling out of boats and canoes all the
time! I regularly scan a local canoe launch and regularly find money and jewelry.

**Two Tools That Made All the Difference**

**Pin Pointer**, for two years I searched without a pin-pointer. In the first month of having one, I found more treasure than in those first two years. Get a pin-pointer and if you can afford it get a good one like the [Garrett Pro-Pointer AT](#).

**Headphones**, your batteries will last longer and you’ll be able to filter out wind noise and concentrate on faint tones indicating a deeper target.

![Image](image-url)

**Upgrades – Getting Serious**

Eventually if you get caught up in the fever of finding treasure some upgrades will make it onto your wish list. I’ll challenge you though, if you have the basic setup described, you should be able to find enough treasure to pay for upgrades.

Two metal detectors have proven performance and make my short list.

1. [Minelab Equinox 800](#), I would say for the money ~$1000 the most versatile detector available. I love mine.
2. [Garrett AT MAX](#), I started with a Garrett 250 and eventually bought an AT Pro. The Max is better and with the wireless Z-lynk system you can concentrate on tones without getting tangled in wires.
An upgraded shovel is great. A consideration, after breaking a regular shovel. A proven brand is Lesche, built to dig and pry the toughest dirt.

If beach hunting is your thing, a sand scoop is necessary. Since this is a specialty item don’t go cheap. Those plastic scoops are good for dry beach sand, but reaching deep into 3 feet of water scooping 8 pounds of sand and stone requires something strong made of stainless steel. A personal favorite is the CKG sand scoop with 7mm holes.

Wow, over 12 pages of metal detecting wisdom! I hope you’ll stick around; I’ve got more stuff heading for your inbox.

Cheers!!

David