

Metal Detecting Basics and Frequently Asked Questions

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1. How do metal detectors work?

Metal detectors transmit an electromagnetic field from the search coil into the ground. Any metal objects within that field respond by transmitting back an electromagnetic field of their own. The detector's search coil receives that signal and alerts the user. Most modern detectors can discriminate between different metals, and better machines can be set to ignore unwanted targets, such as iron, nails, bottle caps, etc.

2. What things can you find with a metal detector?

Metal detectors will detect most metals, but will not detect non-metal objects like pottery, glass, plastic, gemstones, etc. Sometimes you will find a grouping of old broken pottery, for example, in a farm field and that would be a good place to detect for metal objects as well. Sometimes people will use a metal detector to find buried metal objects such as USGIS stakes and well covers, however most hobby detectorists use their metal detectors to search for coins, tokens, relics and jewelry.

3. What kind of coins can you find around here with a metal detector?

Aside from an occasional foreign coin, I have mostly found coins ranging from modern (clad) to pre-1900 coins dating back to when this area was first settled. Coins are wonderful to find because they are clearly dated, which gives you a pretty good idea of how old the site is that you're searching on, as well as what other coins you might find in the area. The most common older coins I find are pennies, nickels and dimes, as larger coins were worth a lot of money back in the day (so if someone lost, say a Morgan dollar, they would be more likely to search for it than if they lost a penny). I also find nickels, but since nickels tone very similarly to pull tabs, sometimes they are overlooked as targets.

3. What is discrimination?

Target discrimination is the detector's ability to identify buried targets based on their conductive and/or ferrous properties.

4. What is ferrous versus non-ferrous?

Ferrous targets are made of iron – this can include nails, bolts, and many old rusty items you would find buried in the ground. You can tell if an item is ferrous if it is attracted to a magnet. Non-ferrous targets include coins, jewelry and tokens, so much of what we search for are non-ferrous targets. That said, you can often find a good (non-ferrous) target in the same hole with iron (nails, rusty cans, etc.) which is why it is helpful to have a machine that can discriminate between targets and also help you to avoid ferrous targets.

5. What do I need to get into the hobby?

At a minimum, you would need a metal detector and a shovel, but I also recommend getting a

pinpointer (which helps you locate the target once you dig a plug), a finds bag (which helps you to collect and haul your junk targets as well as keep your finds), and a pillowcase (to help you dig cleaner plugs and leave the ground as good as you found it). I use a Garrett ATMax, but there are several brands of detectors at various price points, including Fisher, Garrett, Minelab, and Anfibio. See <https://diggun.com/detecting-tools/> for more information and links to get started.

Table of US Coins Minted 1800-present

Pennies	Nickels	Dimes	Quarters	Half Dollar	Dollar
Modern Penny (Zinc)	Modern Nickel	Modern Dime	Modern (State) Quarter	Kennedy Half Dollar	American Innovation Dollars 2018
Modern Memorial (Zinc)	Jefferson Nickel	Silver Roosevelt dime	Washington Quarter	Kennedy (40% Silver) Half Dollar	Presidential Dollars 2000-date
Lincoln Memorial (Copper) til 1982	War Nickel	Mercury Dime	Silver Washington Quarter	Benjamin Franklin Silver Half Dollar	Sacagawea Dollar (2000)
Wheat Penny (Copper or Steel during the war years)	Buffalo Nickel	Barber Dime 1892-1916	Barber Quarter 1892-1916	Walking Liberty Half Dollar 1916-1947	Susan B. Anthony Dollar 1979
Indian Head Penny	V Nickel 1883-1912	Seated Liberty Dime 1836-1873	Standing Liberty Quarter (SLQ)	Barber Half Dollar 1892-1915	Clad Eisenhower Dollar 1976-1978
Flying Eagle	Shield Nickel 1866-1883	Capped Bust 1809-1837	Seated Liberty Dime 1836-1873	Capped Bust 1807-1839	40% Silver Eisenhower Dollar 1971-1976
	Washington Nickel 1866 and 190		Capped Bust 1815-1838		Peace Dollar 1921-1935, 2021 (90% Silver)
	Flowing Hair Half-Dime				Morgan Dollar 1878-1904, 1921, 2021 (90% Silver)
					Trade Dollar 1873-1884
					Seated Liberty Dollar 1836-1873

Other Coins: Half Cent, Large Cent, Two Cent, Three Cent, Stella, Trime (3 cent silver), Union and Half-Union, Half Dime, etc. Summarized below, more information is available on www.diggun.com.

- **Half cent**: 1/2¢, 1793–1857
- **Silver center cent** : 1¢, 1792 (not circulated)
- **Large cent**: 1¢, 1793–1857
- **Ring cent**: 1¢, 1850–1851, 1853, 1884–1885 (not circulated)
- **Two-cent billon**: 2¢, 1836 (not circulated)
- **Two-cent bronze**: 2¢, 1863–1873
- **Three-cent bronze**: 3¢, 1863 (not circulated)
- **Three-cent nickel**: 3¢, 1865–1889
- **Trime** (*Three-cent silver*): 3¢, 1851–1873
- **Half dime**: 5¢, 1792–1873
- **Twenty-cent piece**: 20¢, 1875–1878
- **Gold dollar**: \$1.00, 1849–1889 (some early commemoratives were minted in this denomination)
- **Quarter eagle**: \$2.50, 1792–1929 (some early commemoratives were minted in this denomination)
- **Three-dollar piece**: \$3.00, 1854–1889
- **Stella**: \$4.00, 1879–1880 (not circulated)
- **Half eagle**: \$5.00, 1795–1929 (some modern commemoratives are minted in this denomination)
- **Eagle**: \$10.00, 1795–1933 (some modern commemoratives are minted in this denomination)
- **Double eagle**: \$20.00, 1849–1933
- **Half-union**: \$50.00, 1877 (not circulated, some early commemoratives were minted in this denomination)
- **Union**: \$100.00 (planned but not minted, some modern commemoratives are minted in this denomination)