

FAMILY TREASURE HUNTING

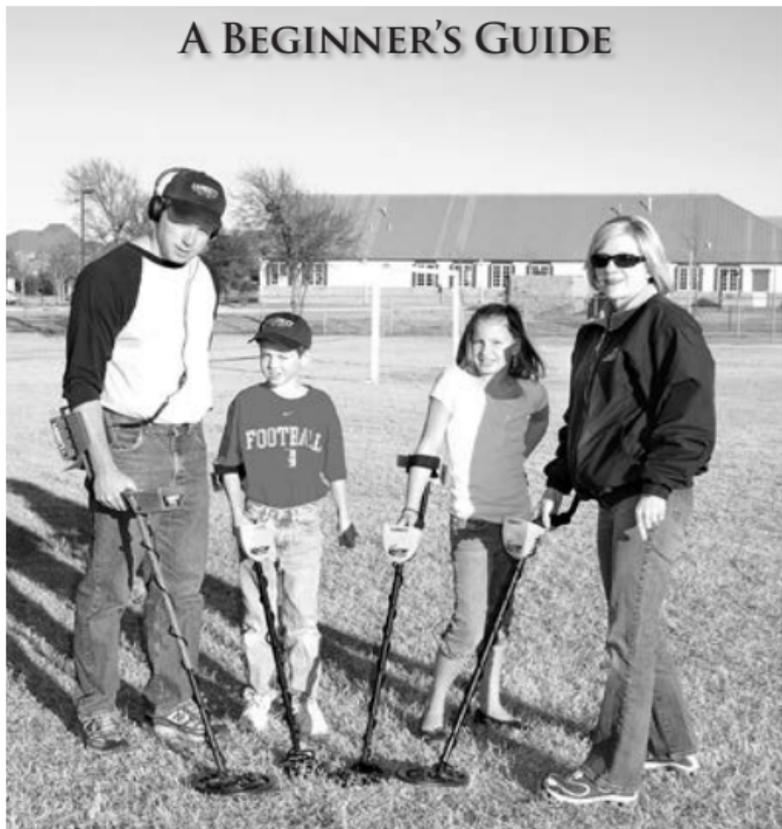
A BEGINNER'S GUIDE



CHARLES GARRETT

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A Pocket-Size Field Guide

TREASURE HUNTING FOR THE FAMILY

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First printing: February 2010

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Author Charles Garrett and his wife Eleanor (foreground) are seen in this late 1960s family photo as they teach their children about the joys of metal detecting.

ABOUT THE AUTHOR

For more than 45 years, Charles Garrett has pioneered the development of the modern metal detector. He has recovered treasures from locations all over the world and has devoted many years to teaching others how to use detectors.

The author's lifetime interest in treasure hunting prepared him to excel in that field. After earning a Bachelor of Science Degree in Electrical Engineering, Charles Garrett worked at two Dallas, Texas, companies, Texas Instruments and Teledyne Geotech. He helped to develop systems and equipment used in America's early space exploration efforts.

During his spare time, Garrett designed and built his own metal detectors in his garage at home. This hobby became a career when he and his wife Eleanor founded Garrett Electronics in 1964 to build and sell his inventions.

The quality of Garrett metal detection equipment is praised today throughout the world. From the beginning, Charles Garrett took his company's inventions into the field to make

sure that they would work well for his customers in different types of environments.

Garrett has been an unofficial spokesman for the hobby of treasure hunting for many years. He has made many personal appearances and has written countless articles and books on the subject of metal detecting.

His current series of pocket-size treasure hunting field guides are perfect to carry along in the field for reference. Charles Garrett enjoys seeing children become interested in his favorite hobby. He is especially happy that this volume celebrates the entire family becoming involved in the thrilling hobby of treasure hunting.

INTRODUCTION: Buying Your First Metal Detector

I am so pleased to see the number of young adults and children who begin the hobby of metal detecting each year. These numbers continue to grow as the technology makes this sport easier to understand for children and more affordable for their parents.

Many veteran detectorists have told me over the years how happy they have been when their wife, their kids or their grandchildren became interested in metal detectors. What a thrill it is to have others in your family catch the “fever” of treasure hunting!

I can’t think of a better way to spend time with the family enjoying the great outdoors on a vacation, in the neighborhood park or even in your own backyard.

Garrett’s entry-level metal detector, the *ACE 150*, has opened new doors for years to the younger generations. The treasure hunting machines of previous decades were often too heavy and too complicated for newcomers or

young children to attempt to master. This has all changed with the advent of instruments that are better for beginners.

How do you decide what metal detector to buy for the beginner?

Your decision will likely be a combination of at least three factors: price, ease of use and the detector's performance. New detectors vary in price all over the board. If you plan on spending less than \$100, don't expect much. As the old saying goes, you get what you pay for. Some of these inexpensive detectors sold at the discount stores will beep when they encounter metal but that's about it. The beginning detectorist using a metal detector which can truly distinguish between trash and treasure is more likely to stick with the hobby.

The *ACE 150* and the more advanced *ACE 250* are both lightweight detectors with controls that are easy for beginners to understand. In fact, Garrett has long promoted the fact that these powerful metal detectors offer One-Touch™ Treasure Hunting. Simply put, users of any age can begin searching for treasure by



“The family that plays together stays together.” A good example of this old adage is the family that finds a common interest in an exciting hobby such as treasure hunting. This young man is showing off a quarter located under park playground equipment.

merely pressing one power button to turn on the detector. The *ACE* is automatically reset to your



Treasure hunting is a family hobby that provides the benefit of exercise in the outdoors and the chance to find and appreciate nature and history.

most recently used search mode and is always ready for searching.

Most metal detectors do not require special tools for assembly. Garrett *ACE* series detectors use four AA-size batteries, which are included with the detector. Simply follow the detector's owner's manual to install the batteries. The owner's manual also shows how to attach the searchcoil and the searchcoil stem to the control box. Once you have assembled your detector, you are ready to begin searching for treasure.

The goal of this latest field guide is to walk beginners—especially younger searchers—through the basic steps of what they will need to know to begin their journey toward being a productive treasure hunter. As the title implies, this field guide is truly a beginner's manual which is designed to teach the fundamentals of detectors and treasure hunting. Explanations have been kept brief, and numerous photos have been used to illustrate how to search and recover treasure targets.

Since the *ACE* series detectors are ideal for newcomers—especially younger beginners—to

learn, we have used the *ACE 150* and *ACE 250* for most of the photos in this guide. Once you have mastered your technique with an *ACE*, you will find that most of the basic techniques are just the same as you “step up” into a more sophisticated detector.

What a joy it is to see the thrill in a new hunter’s eyes when he or she finds that first coin or that first nice relic! Trust me...I experienced it many years ago while teaching my children how to use metal detectors.

I hope this guide will help your entire family connect with each other while enjoying our exciting hobby.

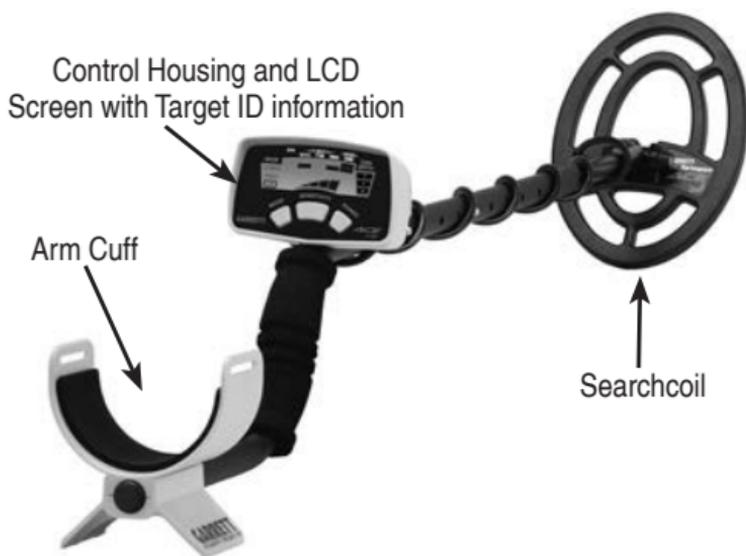
Charles Garrett

Garland, Texas

How does a metal detector work?

There is quite a bit of science to how and why metal detectors work the way they do. You don't really have to understand what goes on inside the control box to enjoy treasure hunting, but a little knowledge can actually help you.

How can it help you? There are many different types of metallic items you might encounter while searching with your metal detector. It is important to understand that most detectors are able to identify different types of metals.



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. A magnetic field is created all around your detector's searchcoil. As you move the detector's coil over the ground, this magnetic field moves with it.

See Figure 1A below.

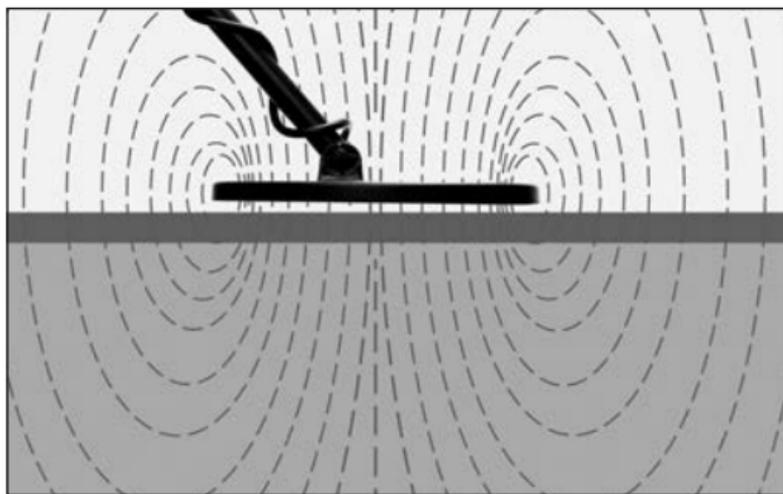


Figure 1A. Your metal detector transmits magnetic energy through its searchcoil into the air and ground around it.

When your searchcoil moves over a metal item, the magnetic field is disturbed or distorted. This distortion is sensed by a second coil of wire in your detector's searchcoil which is known as a *receiver coil*. The closer you move the searchcoil to the metal object, the stronger the magnetic field becomes. The stronger signal picked up by the receiver coil produces a stronger signal sound from your detector's speaker.

See Figure 1B below.

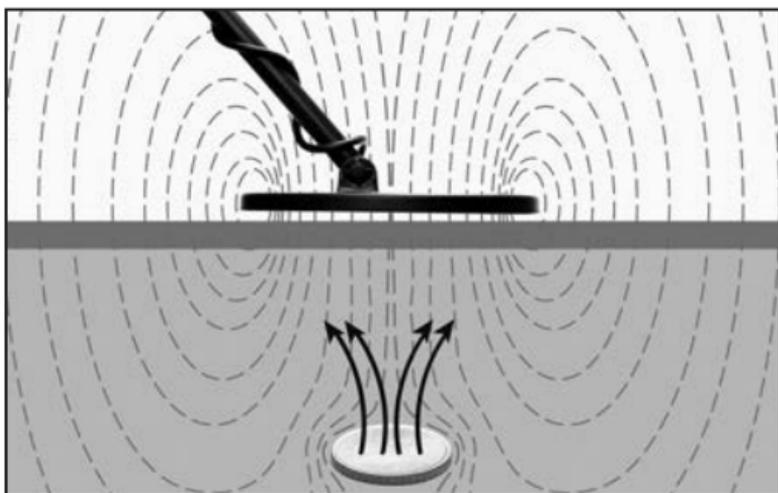


Figure 1B. This simple illustration shows how the magnetic field is disturbed by a large silver target. Signals are reflected back toward the metal detector's receiving coil inside the searchcoil.

There are two main characteristics of any metal that help your detector identify what it has found. Every metal has certain *electrical* properties and certain *magnetic* properties.

People who use metal detectors often use the terms *ferrous* and *non-ferrous*. A ferrous metal item simply means that it is magnetic. Iron and steel are examples of ferrous metals. The magnetic energy of a metal detector is drawn into ferrous items.

Non-ferrous (non-magnetic) metals reflect your detector's energy back toward the search-coil. Pure silver is the most *conductive* non-ferrous metal and therefore gives a very strong signal on your detector.

How do I understand the signals from my metal detector?

When your metal detector locates an object made of metal, it will give you some type of signal. With Garrett's *ACE* detectors, you will receive two signals. First, Garrett's Graphic



Target ID technology allows the detector to display your target's probable identification on the LCD screen. A Target ID cursor will illuminate below a printed Target ID legend above the LCD screen to indicate commonly found coins and other metal targets.

Second, you will hear a distinct audible tone based on how conductive the target metal is. This sound is known as the Tone ID. The *ACE*

detectors make a unique *belltone* signal when they encounter highly conductive targets such as U.S. coins.

To better understand the Tone ID signals your detector can make, lay your detector down and practice scanning several different items in front of its searchcoil. Set your detector up on a surface that is away from any metal, such as on top of a wooden table. This type of test is known as an *air test* or *bench test*.

Collect several different test items to learn the Tone ID of your detector. Some recommended test items are:

- Penny
- Nickel
- Quarter
- Metal pull tab or bottle cap
- Gold ring or jewelry piece
- Iron nail or large metal paperclip

Select one item at a time to move in front of your searchcoil. The Garrett *ACE* detectors will make the unique belltone sound for the *highly conductive metal items* such as the U.S. quarter,



This selection of test targets—including modern coins, gold, a pop top and an iron nail—will produce varying Tone ID signals.

dime or penny. This long signal sounds like the “ding-ding” of a small bell.

Medium-conductivity items will make a different, standard-pitched audio signal. Examples of this sound are a U.S. nickel, a gold ring or most international coins. Notice that this signal is a shorter beep than the belltone sound.

Low-conductivity targets produce a low-pitch audio signal that is much deeper in tone than the other signals. Examples of items that create this sound are iron, nails, and paperclips.

How do I begin using my first metal detector?

It just can't get much easier than using a Garrett ACE metal detector

Simply push the power button to turn on your machine. Hold the searchcoil about a foot above the ground as you turn on the power. You are ready to begin hunting (*see Figure 1A*).



Figure 1A

1. **Keep your searchcoil very close to the ground when you are searching.** Keep your searchcoil 1 to 2 inches (3–5cm) above the ground at all times without bumping the ground (*see Figure 1B*). If the ground changes in elevation, follow the rises and falls of the ground with your searchcoil. Try to keep the coil at least 1 inch above the ground as you do this.

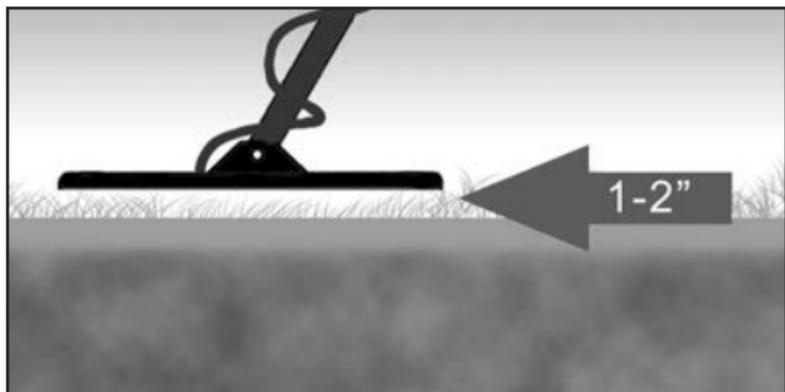


Figure 1B

2. It is also very important to **keep your searchcoil level and parallel to the ground.** This produces the best detection results. If your searchcoil lifts off the ground at the end of your swing, you will be less likely to detect deep treasure targets (*see Figures 1C and 1D*).

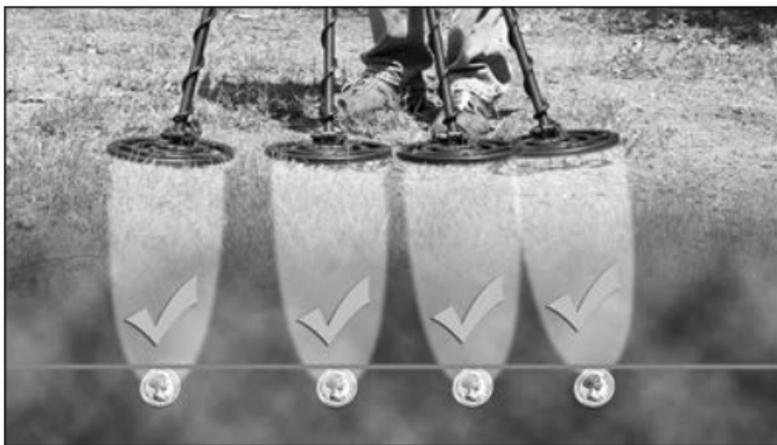


Figure 1C. This illustration shows that a level searchcoil is able to look deeper into the ground. By swinging the coil just above the ground nice and level, this person is able to find all four coin targets.

3. Scan the searchcoil from side to side in a straight line in front of you. Don't reach out. This helps keep the searchcoil level.

4. As you move forward, make sure your searchcoil overlaps the ground you have already scanned. You don't want to miss any areas. With most searchcoils, the detection area is best below the center of the coil. Larger size searchcoils will allow you to cover more ground with each swing.

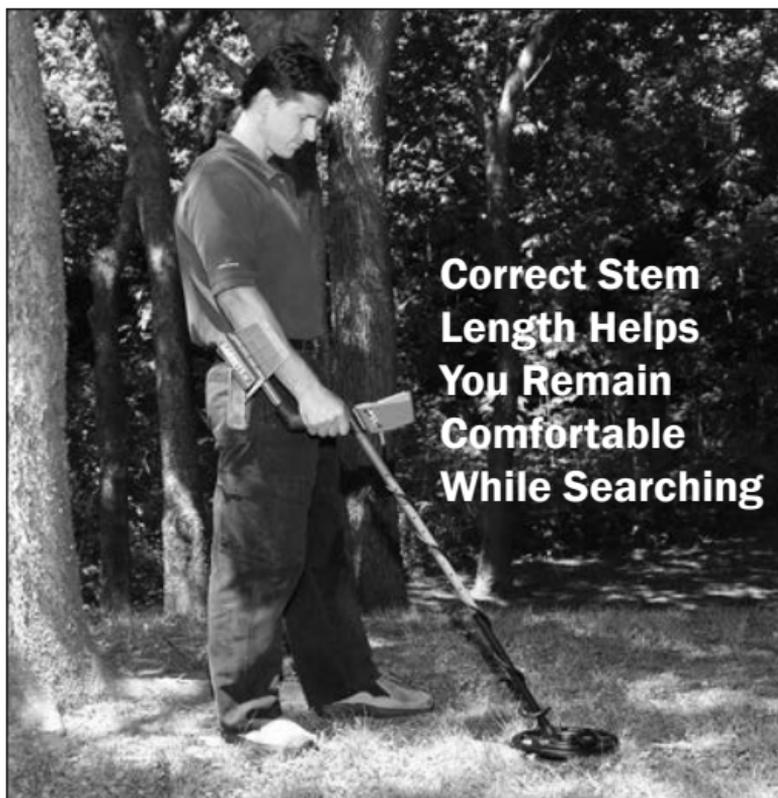


Figure 1D. This person is lifting his searchcoil off the ground at the end of his swing. As the coil moves away from the ground, it does not penetrate as deeply into the earth. In this illustration, three of the four coins would not be detected.

5. Scan the searchcoil over the ground at the rate of about two to three feet per second. Slow and steady swings will usually help you find more treasure targets. Do not get in a hurry to search a large area.

Other Tips:

- *Hold your detector with your dominant hand.* This is usually the hand which you use for writing or eating. This leaves your less domi-



**Correct Stem
Length Helps
You Remain
Comfortable
While Searching**

nant hand free to carry your digging tool or pinpointer.

- *Adjust your detector's stem length to a comfortable position before searching.* Stand up straight and extend your arm out naturally while holding your detector. Let your parents help you here.



Your searchcoil should hover just above the ground in this position. If your detector's stem length is too short, you will find yourself leaning forward as you search. This may cause your back to ache after a long period of searching. Adjust this stem until you can walk naturally with your detector.

How can I tell exactly where my target is located?

With a Garrett *ACE 250* metal detector, use the Pinpoint pushbutton to determine the exact location of a target you have detected.

First, move the searchcoil to either side of the target's loudest audible tone. Press the Pinpoint button and hold it down while sweeping the coil at a constant height over this target area.



Sweep the searchcoil from side to side and front to back while keeping the coil as low to the ground as possible. Locate the area making the loudest signal.



Keep the searchcoil at a constant height just above the ground. As you hold the Pinpoint button down, move the coil from front to back and side to side. Try to find the loudest (strongest) signal.

When you are pinpointing, the upper scale on the *ACE*'s LCD screen indicates signal strength. The number of LCD segments (or pixels) increase from left to right. When the greatest number of segments are shown, your searchcoil is directly over the target. The LCD screen on an *ACE 250* also shows the depth of the item.

The pinpoint location for most targets will be right under the center of your searchcoil. Some items—such as an oddly-shaped piece of iron or a very shallow coin—might be closer to the front of the inner coil.

With practice at pinpointing, you will be able to locate objects very quickly. Always listen for the loudest audio signal while you are pinpointing and watch for the largest number of top-row (upper scale) segments on your LCD.

(See Figure 1E on next page for reference.)

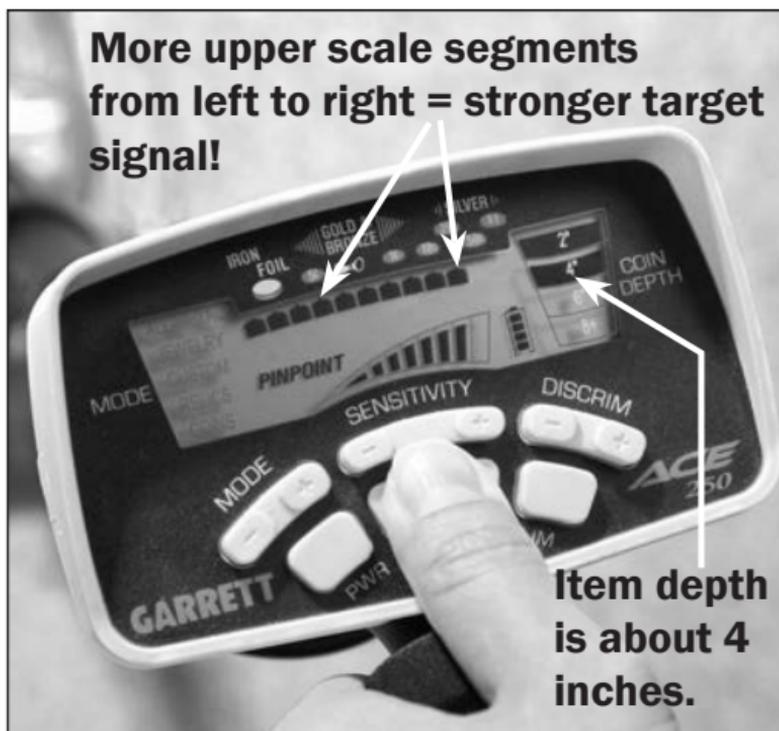


Figure 1E. Keep the Pinpoint button pushed down as you hold the searchcoil right above the target. The stronger the signal is, the more upper scale segments you will see. While you are pinpointing, the “Coin Depth” scale will also show you the approximate depth of your target. (It may or may not be a coin.)

Where should I begin hunting with my metal detector?

Great question...but here's another question: *what* do you want to find? Sometimes, this answer will help you figure out where you want to hunt. If you are just getting started with your metal detector, you will probably be happy finding some lost coins or jewelry. If so, there are many places I can suggest you start your searching.

- *Your own back yard.* What better place is there to start? Think about the coins, small metal toys or even jewelry that may have been dropped in your yard over time. It's a great place to practice and you truly never know what you and your friends might find. You might even dig up something that *you* lost years ago!

- *Parks.* Community playgrounds or neighborhood parks are great places to start. Search around slides and playground equipment where people lose coins or jewelry while playing. Be



Young searchers who are just beginning with metal detectors can improve their skills by first learning to recover targets with an experienced parent in easy-to-dig soils such as the loose bark covering this playground.



This father shows his kids just how easy it is to find lost rings and coins near such frequently-used playground equipment. Using the “buddy system” when there is only one detector available, the family can take turns detecting and recovering targets.

respectful of public areas. Do not leave holes and be careful of damaging manicured grass. **Be sure to read the section in this book called “How do I recover my targets?”**

- *Sports Fields.* These same parks may have fields for team sports such as soccer, baseball or football. Try searching around the outside areas of the playing fields where people sit in their lawn chairs or in the bleachers.



These bundled-up spectators will unknowingly loose coins and other items as they jump to cheer for their team. Searching around such playing fields can be productive with a metal detector.

- *Swimming Areas.* Do you live near a lake or pond where there is a public swimming area? Many such areas have nice, sandy beaches for wading and playing. People often lose rings and other jewelry as they swim and play. The loose sand is a great place to learn how to use your metal detector to pinpoint and dig targets.

This volleyball court is a great place to learn how to pinpoint and dig treasure targets. Such sandy areas are ideal for practicing your skills.



If you live near an ocean beach, this is a very popular place for metal detectors. Look for the areas where tourists gather in big numbers and you can bet that they will have lost coins and other valuable items.



Take your metal detector along on family vacations to search parks and picnic areas. You never know just what you might find in other states or countries.

- *Vacation travel.* Your metal detector can be a source of fun wherever you travel. Take it along on summer vacation or on your next camping trip. There are lost treasures to be found almost anywhere in the world you might travel. All you need is a detector and the desire to go hunting!

- *Fair grounds and carnivals.* Many towns have an annual carnival or fair during the fall months. Thousands of people visit such fairs to enjoy the rides and play the carnival games. Many coins will be lost during the fair. If you can obtain permission to search this property once the fair is ended, you may be able to make many nice discoveries.

- *Vacation travel.* Your metal detector can be a source of fun wherever you travel. Take it along on summer vacation or on your next camping trip. There are lost treasures to be found almost anywhere in the world you might travel. All you need is a detector and the desire to go hunting!

How do I recover my treasure item?

Once you have located a good target signal such as a coin, you are ready to retrieve it. Your goal should be to dig up the item without damaging it. You should also leave the area looking like it did before you started digging.

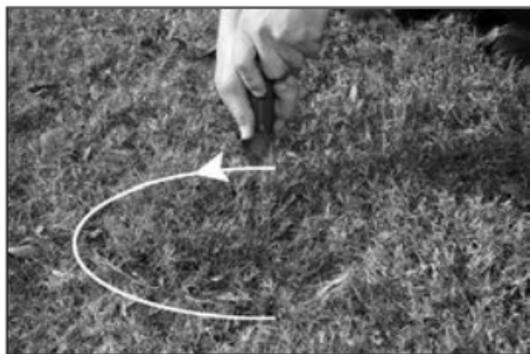
Retrieving coins or jewelry from sandy areas is fairly easy. Digging items out of hard-packed clay under thick grass is challenging.

Here is a recovery method to use in grassy areas or lawns. Pinpoint your target and dig a C-shaped half circle around it with your shovel or trowel. The depth of this half-circle should be three to four inches. (*See photos and steps for Method 1.*)

METHOD 1:

(Use to protect the grass roots.)

Start on one side of the target area and work around in a semi-circle.





Use your trowel to make a half-circle. If the soil is tough, use both hands to push the trowel blade through the ground. (A larger size shovel can also be used.)



Continue to dig a full "C"-shaped pattern around the area of your target.



The shovel should go three to four inches deep each time until you finish the "C" shape.

Use your trowel to lift and fold the turf back. Grass roots will remain intact if you have made your half-circle turf plug three to four inches deep.



Scan the plug and hole with your detector. Your item may already be in the plug you have removed. If not, dig additional soil and place it on top of the sod that you folded back.



Locate your item using a pinpointer if you have one. A pinpointer is a great recovery tool to help you check for other treasure items that might be in the same hole.





Scoop the loose soil back into the hole. Press the turf back into place with your hand. Use your foot to pack it firmly back into place.



The ground where this silver coin was recovered should look as if you've never been there!

After using the process shown in the photos above, pack the turf back into place with your foot. This will prevent a loose chunk of turf from being pulled up by a lawn mower.

For deeper targets, you might prefer to dig a plug—a deep, square that can be lifted away from your digging area. (*See photos and steps for Method 2.*) Use your shovel to push down deeply into the soil in a square shape around

METHOD 2:

(Use to dig a plug of soil around the area of your treasure target.)

Pinpoint the target spot with your metal detector. Then, use your shovel to break the ground around the center of the target area.

Imagine that your target is in the center of the area you are digging.



the pinpointed area. Using your shovel, lift the square from the ground and set it carefully to one side. The more dirt that is left in the plug, the more likely the removed grass will live when you replace it.

Use your pinpointer to determine if the item is within the plug or still in the target recovery hole. Use a shovel to remove more earth until there is no longer a signal from the hole.



Using your shovel, press down firmly into the soil. Push the shovel blade just a little deeper than your target depth is shown to be. (You don't want to damage the item with the shovel.)

Continue in a full circle around the pinpointed area. If you are working with a straight-edged spade, you can also dig a square plug.



Once the ground is completely broken, lift the plug out with your shovel.

Place the plug upside down near the hole.

Scan the plug and the hole with your metal detector.



If the signal is still inside the hole, remove another scoop of earth and scan again.



Once the target signal is coming only from the excavated soil, use your pinpointer to locate your treasure item.

These are just two of the most basic ways to recover a target. As you become more experienced with metal detecting, you might find other retrieval methods that work best for you. Whatever method you choose, *always leave your recovery area in good shape after you have found your coin or treasure.*



This girl completes her treasure recovery by scanning the removed soil with a pinpointer.

Once she has found her coin, she then scoops all the loose dirt back into the opening.

She next replaces the plug of sod and finally uses her foot to firmly press it back into place.



Why do some treasure hunters like to use pinpointers?

Small targets are often very hard to find. A coin that has been in the ground for many years can be very corroded and may blend right in with the soil color.

A quality hand-held pinpointer will often lock in on a metal item faster than you can spot it with your eyes. Garrett's *PRO-POINTER* can even be used to help dig through the dirt you have removed. It has a scraping blade made for sifting through soil, grass, sand or gravel.

The pinpointer will help you find treasure targets faster so that you can get back to



Once you begin the recovery of a treasure target located with your metal detector, a pinpointing metal detector such as Garrett's *PRO-POINTER* can speed the process.



Use the pinpointer to scan the excavated soil. Small objects may blend in very well with the color of the dirt.



You might have to break up thick sections of hard soil into smaller pieces to help narrow down the location of the target.

searching. You should also use a pinpointer to double-check the recovery hole for other targets. Sometimes, you might find two or more coins together!



This teen would probably have had trouble finding this small coin without the use of her Garrett *PRO-POINTER*.

If you do not have a pinpointer, you can use your detector's searchcoil to help locate a small treasure target. Once you know about where the item is, scoop handfuls of dirt and pass them directly in front of your searchcoil about two inches away. Make sure that you are not wearing a ring, bracelet or anything metallic on your hand that is passing the dirt in front of the coil.



No pinpointer? Pass handfuls of dirt in front of your searchcoil until you get a signal response. Be sure to remove all jewelry or metal from this hand.

What do I do with the trash I find?

Sometimes your target might prove to be a piece of junk metal. Good treasure hunters always remove such trash. Do not leave it for someone else to find again later.

Wear a treasure pouch or a treasure apron when you search. It should have more than one compartment or pouch. This will allow you to



Wear a treasure pouch to collect your treasure and your trash. Put coins and good items in one pocket and your scrap in another.

keep your good treasure items in one area and the junk metal you find in another.

It is always a good idea to examine the junk metal when you return home. If you have items that you are not familiar with, carefully rinse or brush them off. The junk metal items—such as soda can pull tabs, pop tops, nails, etc.—should be properly disposed of in a garbage can.



Sort through your finds at the end of your hunt. All junk metal, such as drink can pull tabs, should be thrown into a trash container. Don't leave trash items for someone else to find again later!

Is metal detecting good for my health?

You bet! This is a hobby where you spend time outdoors enjoying the sunshine and fresh air. You are constantly walking, which builds leg strength and is good for your heart.

Your detector may be light in weight but you will strengthen your arm or arms by swinging it



Enjoy being outdoors as you hunt with your family and friends. Metal detecting is good exercise and everyone can enjoy looking at the discoveries you make.

for several hours. Don't forget about the energy you will spend when you begin digging up your treasure items.

Be sure to bring along plenty of water to keep your body hydrated as you search outside. You can bring along energy snacks or a piece of fruit to refresh yourself.

Treasure hunting is also something you can enjoy with your family or your friends anywhere you go. You might make some new friends who have common interests.

What is the buddy system of treasure hunting?

Metal detecting with a family member or a friend is a great way to improve your success rate of finding treasures. One person scans with the detector and pinpoints each detected target. He or she inserts a marker such a popsicle stick or a golf tee into the ground. Then that person moves on to find the next target.

The second person digs the target, fills in the hole and then moves on to the next marker. This

method works well if only one metal detector is available. Of course, this person can recover the targets even faster if he or she also has a metal detector.

What type of clothes should I wear to go treasure hunting?

You should always dress comfortably. In cooler months, wear layers of clothing. If you become too warm, you can remove your coat. In warmer weather, perhaps the only clothing you need are shorts, a tee shirt and sneakers. It is always important to protect your skin from the sun with a high-numbered sun screen.

Some searchers wear gloves to protect their fingers while they are digging targets. During warm weather, I sometimes wear a neck shield that attaches to my hat. This keeps the back of my neck from becoming sunburned.

Be sure to wear old tennis shoes or rubber boots if you will be in wet areas. Whatever you wear, I urge you to protect yourself against the



This brother and sister from France have dressed for cool, fall weather. They have comfortable, long sleeve shirts and rubber boots that will be easy to clean.

weather and to be comfortable. Don't allow clothing issues to affect your hunting ability.

Are there places I should not use my metal detector?

Absolutely. You never want to get into trouble by trespassing or using your detector in a place where it is not allowed. State and national parks and national monuments are certainly off-limits.

Local city or neighborhood parks are often good places to start. Every square foot of land in the United States is owned by a person, a company, a city, a state or the government. Make sure that you have permission from the landowner before you search for treasure. If you plan to hunt on public property, have your parents check to see if there are any restrictions against the use of metal detectors.

SPECIAL ADVICE

There is so much you will learn as you spend more time with your metal detector. In the next few pages, I will offer you some basic advice that I believe will make you a better treasure hunter.

- *Keep a log or journal of your finds.*

It is fun to look back and see how many coins and other items you have found after a few months. Write down *where* you found coins each day and how deep they were buried. Over time, you will begin to see patterns of where your better hunting locations have been.

To get you started, I've included a blank journal page in the back of this book (see page 75). *On the right hand page is an example of how this form would be filled out by a searcher.* You can start your journal by recording your first finds write in this field guide. You can also use this idea to create your own treasure hunting journal.

METAL DETECTING JOURNAL

Date: Dec. 5, 2009

Location: School

Finds: Dime 1996

3 Pennies 1954 1980

2006 and a silver ring

Notes: Best finds

near jungle gym

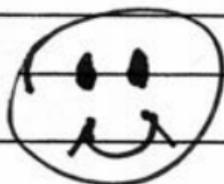
Date: Dec. 12, 2009

Location: Grandma's house

Finds: Mercury dime

1931

Notes:



- *Learn your detector.*

The more you understand your detector, the better suited you will be to understand the signals it provides when your searchcoil passes over a potential treasure target. Read the entire owner's manual and watch any instructional DVD that is provided when you purchase a new metal detector.

- *Use headphones with your detector.*

You will soon learn how important they are. You will hear target sounds that you sometimes could not hear before just by listening to your detector's speaker. Headphones also keep your detector quiet if you are in a park or public place where you might bother people.

- *Return to sites you have already searched.*

By the time you have spent 100 total hours searching with your detector, you should be very comfortable with it. You can now return to places you hunted when you were first learning your detector.

You might be surprised at the amount of coins and other items you missed as you were learning to use your metal detector.

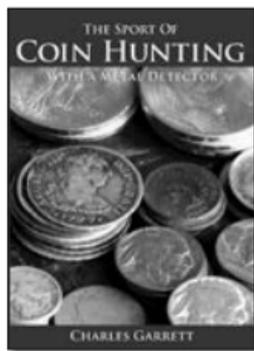
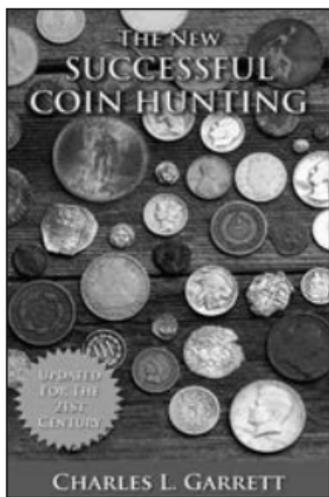
- *Learn about different types of coins.*

It's important to learn the value of coins so you will know when you find a really good one. Did you know that U.S. coins minted before 1965 were made of about 90% silver?

In 1964, the U.S. government decided to quit using silver to make its coins because of



The author highly recommends the use of headphones with your metal detector.



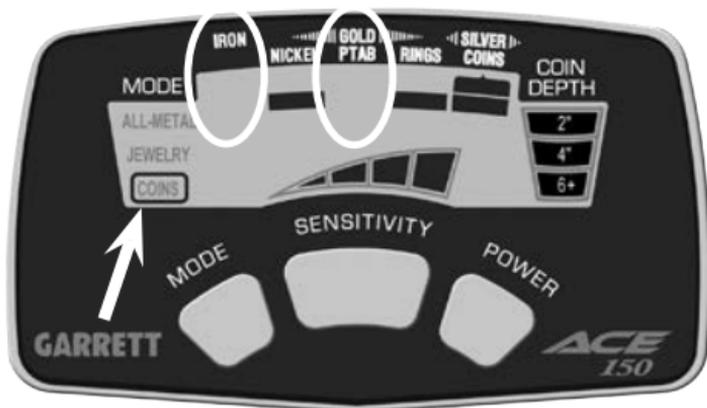
You can learn more about coins and coin-hunting secrets in these two books written by author Charles Garrett.

the expense. Since that time, U.S. silver dollar coins, half dollars, quarter dollars, and dimes have been made with an alloy of copper and nickel. These coins made today back to 1965 are often called *clad coins* because of their composition.

- *Decide which search mode to use.*

Many of today's detectors, including the *ACE* detectors, give you the freedom to decide *what* you will find and what you won't find.

You are using *discrimination* when you choose between one of the different modes on your detector such as Coins or Jewelry. With



This ACE 150 is operating in the Coins Mode (see white arrow above). This means that certain metals are being ignored, such as iron and pull tabs (see the two white circles above).

metal detectors, discriminate simply means that your machine is ignoring certain metallic items.

For example, the **Jewelry Mode** on an ACE 250 or ACE 150 is a setting designed to help you find rings, watches, bracelets, necklaces and other fine jewelry items more easily. Jewelry Mode ignores most trash items such as bottle caps and nails.

The **Coins Mode** on an ACE metal detector is designed to help you find all types of coins while ignoring iron, bottle caps and most drink can pull tabs.

The *All-Metal Mode* on ACE detectors is designed to detect every type of metal. It should be used when you want to find all metal items or when you are unsure of the type of metal you want to find.

- *Dig up everything you detect when you first get started.*

The best way to learn is by experience. Set your detector to the All-Metal Mode for your first few hunts. I recommended hunting your first 10 hours in the All-Metal Mode. You will learn how your detector responds to different metals.

- *Always guess the identity of your target before you dig.*

Did you get it right? If not, keep trying. You will get better and better. You will gradually find more treasure because you will learn to ignore more of the trash targets.

- *It's more fun treasure hunting with family and friends.*

Parents who enjoy hunting with their kids know that there will be times when they are too busy with work to be able to detect. It is therefore a good idea for kids to locate others their own age who enjoy hunting for lost treasures with metal detectors.

Treasure hunting clubs are among the best places to meet new friends in your area who have a common interest. Many people have no idea how much fun it is to locate coins and



Treasure hunting is always more fun with friends and family—especially seeing what you will dig up next!

other lost items with a metal detector. Let some of your friends practice finding and retrieving a target with your machine. They might just want to join you in your new hobby!

- *Be patient but be persistent.*

All you need is a little skill, a little luck and a lot of desire. The more you practice with your detector the more skillful you will become at recovering good treasure items.

Luck always plays a role in what you will find. Some days may not be as productive as others, so it's important to just have fun while you're out searching. In time, you will find something to be proud of.

What kind of things can I hope to find?

The sky is the limit, I like to say. Anything that has been lost or hidden can be found with your metal detector. This includes coins, rings, watches, necklaces, tokens, medallions, relics, and more things than you can imagine.

Some new detectorists have found gold when they use their detectors in regions where prospecting is good. Others have even found caches—hidden stashes of money or jewelry.



Robin B. (above) was only 5 years old when she found her first quarter with an ACE 250.



Garrett B., the boy from Arizona shown above, found his first gold nugget while hunting in Nevada with his grandfather.

(Left) Garrett holds out the nugget he found with his Garrett ACE 250 on his first gold hunt.

The next few pages include photos of just a few of the new searchers who have shared their favorite finds with Garrett. I always love to hear from my customers when they find anything at all that brings them excitement.

Our company website, www.garrett.com, includes photos and stories of other interesting metal detector recoveries. Maybe you will want to show off something great that you find in the future. Ask for your parents' permission in helping to view our website to see how.



Rachel M. from Fairfield, Pennsylvania began going metal detecting with her father when she was age 4. She loves her hobby because she gets to keep all the money she and her dad find!



Cameron, a 10-year-old searcher from Dallas, found a cache of 82 coins and some paper money. He was searching with his *ACE 150* around an apartment complex.



Just one week after buying his ACE 250 metal detector, David A. (above) of Portland, Oregon made a fabulous jewelry discovery. The ring (right) he found was 14k gold, included a 1.5k center diamond stone and numerous smaller diamonds. David had the ring appraised by a jeweler for \$15,000!





Treasure hunting is a multi-generational hobby that can be equally enjoyed by the young and the young at heart.

Kids' Code of Ethics for Treasure Hunting

A code of ethics was developed by treasure hunters and metal detector clubs many years ago. I believe that children and young adults should live by a similar set of rules as they search for lost treasures.

These are not laws. They are a set of general guidelines that parents and kids should go over together. Parents might have a few of their own rules to add to this code.

1. I will always get permission from my parents (guardian, etc.) to metal detect. I will let them know who I will be hunting with and where I intend to hunt.
2. I will be polite at all times and not annoy others or interfere with their activities
3. I will remember that all property is owned by someone and make certain that I have the owners' permission before I hunt on any privately owned property.

4. I understand that on some public property metal detecting is not permitted, especially state and federal parks and other historical or archeological sites.
5. I will stay away from any areas or targets that I dig that appear dangerous.
6. I will cause no damage to property of any kind, including fences, signs and buildings.
7. I will fill all holes that I dig.
8. I will carry all trash and dug items with me when I finish hunting.
9. I will try to leave all places where I hunt in better condition than I found them.

(Facing Page) SAMPLE JOURNAL PAGE

Copy this template to create your own metal detecting log book. See page 59 for an example of how to record your treasure discoveries.

METAL DETECTING JOURNAL

Date: _____

Location: _____

Finds: _____

Notes: _____

Date: _____

Location: _____

Finds: _____

Notes: _____

CAUTION

When searching for treasure with your Garrett detector, observe these precautions:

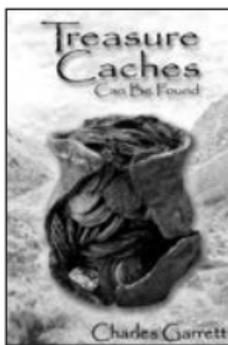
- Never trespass or hunt on private property without permission.
- Avoid areas where pipelines or electric lines may be buried.
- National and state parks / monuments, etc. are off-limits. If you are unsure if you can use your metal detector in any area, seek permission from the proper authorities.
- Do not hunt in a military zone where bombs or other explosives may be buried.
- Do not disturb any pipeline, particularly if it could be carrying flammable gas or liquids.
- Use reasonable caution in digging toward any target, particularly in areas you are uncertain of the ground conditions.
- Most detector control housings are not waterproof so exercise caution if searching at the beach or near a body of water.
- Always be cautious of snakes and other dangers while searching or digging targets.

THE GARRETT LIBRARY

These standard-size 5.5" x 8.5" format books offer treasure hunting techniques, hints and history from Charles Garrett and other RAM Books authors. Each book is soft cover format unless otherwise noted.



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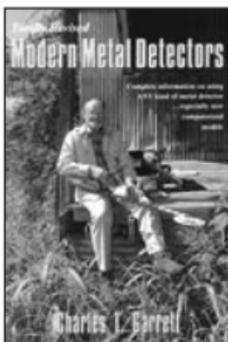
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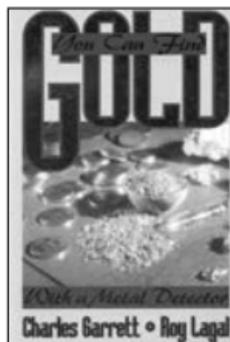
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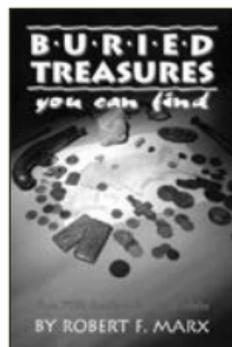
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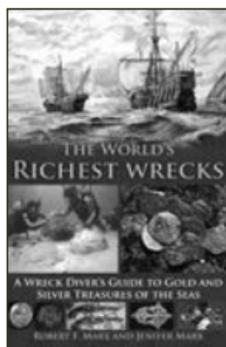
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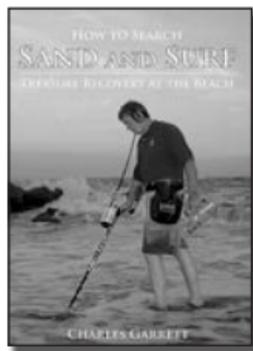
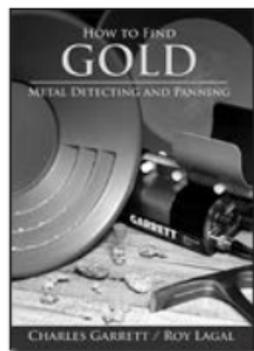
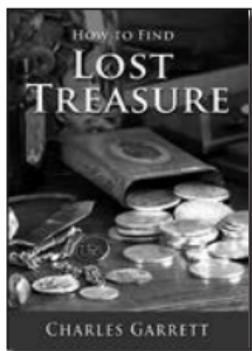
OTHER RAM BOOKS

Please note that RAM Books, the publishing division of Garrett Metal Detectors, continues to release new titles each year related to treasure hunting, gold prospecting, coin hunting and relic recovery.

To see a current list of titles available from RAM Books, please consult a Garrett Metal Detectors hobby catalog or visit:

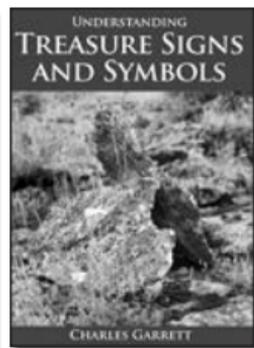
www.garrett.com

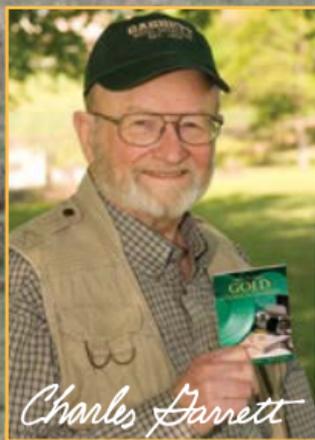
After reaching Garrett's website, visit the Hobby Division section and select "RAM Books" to see all of our current titles. An order form is available on our site which can be printed and mailed with your requested titles and payment.



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Charles Garrett

Author/master treasure hunter



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