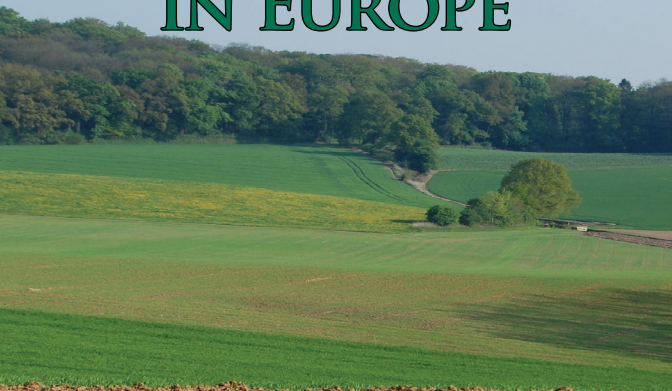


INTRODUCTION TO
METAL DETECTING
IN EUROPE



CHARLES GARRETT

INTRODUCTION TO
**EUROPEAN
METAL
DETECTING**



CHARLES GARRETT

Front cover photos:

Freshly plowed farmland in Belgium where Roman and French artifacts were recovered by Garrett metal detectorists. Inset pictures are of an ancient Roman fibula brooch found in England and two rare hammered gold coins.

Rear cover photo:

A Spanish detectorist at a rally seen using an *ACE 250* metal detector.

INTRODUCTION TO
EUROPEAN
METAL
DETECTING

Introduction to EUROPEAN METAL DETECTING

© Charles L. Garrett 2009

Manufactured in the United States of America.

All rights reserved.

No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage or retrieval system, except in the case of brief quotations embodied in critical articles and reviews. For information, address all inquiries to Editor, Ram Publishing Company.

First printing: September 2009

CONTENTS

About the Author	7
Introduction	9
A Vast Searchground	11
Coins and Caches	12
Buckles, Brooches and Jewelry.....	19
Relics and Tools	24
Prospecting and Coastal Hunting	27
Discrimination and Target ID	29
European Hunting Tips	35
Research Pays Off	35
Learn the Laws	36
Use Headphones and a Pinpointer.....	38
Join a Club and Attend Rallies	42
Involve Your Family.....	45
Some Personal Experiences	47
Cleaning Your Treasures	55
European Code of Ethics	58
Special Advice	63
Other RAM Books	69



Author Charles Garrett, seen on one of his expeditions searching a fort where French and British forces once clashed.

ABOUT THE AUTHOR

For more than 45 years, Charles Garrett has pioneered the development of the modern metal detector, demonstrated its capabilities in searches worldwide and devoted himself to teaching others to use detectors. He has recovered treasures of all types and has made a number of trips to the European treasure fields.

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, where he developed systems and equipment required by America's fledgling space effort. While devoting himself to his hobby, he designed and built his own metal detectors. This avocation became a career when he and his wife, Eleanor, founded Garrett Electronics in 1964 to manufacture and market his inventions.

Garrett quality is praised today throughout the world. From the beginning, Garrett vowed

“to practice what I preach” by field-testing every piece of his equipment—to insure that each detector works for customers regardless of ground conditions and environment. He has become recognized as an unofficial spokesman for the hobby of treasure hunting and the metal detecting industry through a long list of honors, personal appearances and books.

This book on hunting for treasure in Europe marks the latest installment in Charles Garrett’s pocket-sized treasure hunting field guides. He is devoted to disseminating such knowledge in a format that is both convenient and effective for helping individuals recover more treasure with their metal detectors.

INTRODUCTION

As implied by its title, this sixth edition of my pocket-sized treasure-hunting field guide series is intended to acquaint hobbyists with the exciting possibilities offered by metal detecting in Europe. The coins and relics found virtually anywhere in Europe can literally date back hundreds or even thousands of years earlier than those items we are thrilled to recover in North America.

Due to the abbreviated nature of these small “how-to” reference books, we touch only briefly on the many great hunting opportunities that Europe affords today’s metal detectorists. As I write this introduction, however, the RAM Books team is in the final stages of editing a full-length *European Metal Detecting Journal*. The subjects we touch upon in this field guide will be covered in much greater detail in the larger volume which will be filled with hundreds of full-color photos of beautiful coins, caches, jewelry, artifacts, military relics and

assorted treasures found by me and many European metal detectorists.

During my years of testing metal detectors, I have had the pleasure of recovering treasures in England, Scotland, France, Spain, Germany and Italy. Finding my first Roman coin is an experience I shall never forget.

For our North American readers, don't think that metal detecting in Europe is out of your reach. Some detecting clubs organize annual trips overseas to hunt in prime areas of Europe. You can also contact European treasure hunting groups directly to express your interest in joining them in their searches.

I hope to see you in the field...

Charles Garrett

Garland, Texas

A VAST SEARCHGROUND

European metal detectorists are uniquely able to go into the field and find some of the oldest metallic artifacts on Earth in places all across the continent. Some date back to the Bronze Age—more than 4,000 years ago—with more “recent” Roman, Celtic or Viking treasures older than 2,000 or more years.

The first evidence of man’s existence in Europe dates back to around 35,000 BC, during the European Paleolithic period. The preferred metal for tools and weapons of the more civilized Neolithic period was bronze and historians have labeled this the Bronze Age.

The treasures being recovered in Europe today are often as much fun to identify as they are to find. Coins minted in the past few hundred years generally have dates pressed into their designs. Other coins that you recover, however, might require special reference books or professional assistance to identify. The same can be said for certain pieces of jewelry, fasteners, tools, keys and other artifacts.

Bronze, copper and gold were all used to fashion items from the Bronze Age. Some cast bronze axes have been recovered in Europe that date back prior to 2000 BC. Iron Age (700–50 BC) artifacts created with wrought iron have largely rusted away although some nice recoveries have been made in soils that helped preserve such items. Artifacts found that come from the last centuries of the Iron Age are generally of more Germanic or Celtic influence. Celtic craftsmen created elegant coins that are found today in parts of Europe that includes France, Belgium, the Netherlands, Great Britain, Germany, Austria and Spain.

The Roman Empire spread through much of Europe from about 50 BC through the latter part of the 4th century. Roman coins and artifacts can therefore be found in the same fields where modern medieval relics from the European Middle Ages are unearthed.

- **Coins and Caches**

During the height of the Roman Republic, territorial control expanded from Italy over the

Mediterranean area into western Europe and the British Isles. Roman-era coins can thus be found from Italy all the way north and west to the Netherlands. The same field is thus just as likely to yield a fine Roman stater as a modern euro coin.

Many great coin hoards were buried during times of conflict. In some cases, that person may have been killed or driven out by conquerors, thus leaving such caches for today's hunters. In some cultures, farmers threw coins in the field for good luck or to celebrate a good crop season. Other coins were lost by workers picking the crops or were even discarded in rubbish dumps when a new ruler came into power and made the previous coins worthless.



These three hammered gold coins—struck between 323 BC and 69 AD—were found with a Garrett metal detector in Belgium.



Charles Garrett and his son Vaughan Garrett, seen in the Garrett Museum, display some of the Roman and Greek coins they found together on a prior European metal detecting trip.

I found a coin cache in a plowed field in during one of my European trips. I was scanning near an old embankment when I dug the first coin. In an area of about an arm's width, I had soon unearthed another 20 ancient coins. The coins are from the 400 BC period and I figure they had once been in some sort of bag when they were buried. My friend Frank Mellish and several other detectorists with us also found coins and various cast religious objects in this same field. Some of these coins from the cache are on display in the Garrett Museum in Garland, Texas.

My son Vaughan accompanied me on a two-week detecting expedition through Spain, France, Italy, Germany, England and Scotland. Among other places, we visited the stone and turf fortification in northern England known as Hadrian's wall. Roman Emperor Hadrian ordered the construction of these walls in 122 AD to ward off attacks on Roman Britain by a Scottish tribe and to mark the frontier of his empire. Known also as the Roman Wall, Hadrian's wall ran more than 70 miles in length.



Modern view of Hadrian's Wall in northern England. The author and his son Vaughan Garrett found Roman coins near this area.

Much of this wall has disappeared in the past 2,000 years but its remnants are now a popular tourist site. Constructed of squared stone, this ancient wall in places was three meters wide (nearly ten feet) and five to six meters (16 to 20 feet) high. Searching along this ancient frontier

border was certainly a highlight of my European hunting experiences.

Later that day we searched a location that had been a church centuries ago. The current land owner built his home atop the ruins of the old site. Vaughan searched in the center of the yard near the back of the home. He got a strong signal and recovered a mint condition Roman coin six inches deep. Shortly after, just a couple feet away, Vaughan found another coin of the same design, yet cut in half. These eleventh century coins were likely dropped by a church member nearly a thousand years ago! These coins remain as my son's favorite treasure find.

Ancient caches, or hoards, were many times contained in pottery or iron or brass pots before being deeply buried. Through centuries of more modern farm work, plows occasionally shatter these containers and scatter the contents. Metal detectorists continue to make great discoveries of such hoards of coins year after year in Europe. Some of the most deeply buried caches are best picked up with a detector equipped with a two-box searchcoil, or Depth Multiplier.



This impressive hoard of hundreds of Celtic coins was found in an iron pot by a European detectorist with a Garrett GTI 2500.

Some veteran European detectorists are called upon by families to help locate the stashes believed hidden by recently departed family members. These hobbyists generally charge the family a finder's fee between 10% and 50% of the total treasure recovered.

Thanks to the growth of the European Union (EU) there are also a large number of

more modern collectible coins that detectorists can find. At present the 27 countries who have joined this alliance have discarded their former currency in favor of the euro. The smaller 1, 2 and 5 euro cent coins, made of coppered steel, are the most erratic for your detector's target ID scale. They can read so low on a Target ID scale that some detectorist who discriminate out iron might only faintly detect these low denomination coins. In dry sand and regular soil conditions, you can employ more discrimination and still easily detect euros of 10-cent and higher values. The bi-colour 1- and 2-euro coins, which are larger and made of a nickel/brass/copper alloy, register as more solid hits when they are lying flat in the ground.

- **Buckles, Brooches and Jewelry**

European hobbyists are able to find some of the oldest and most fabulous treasures on earth. Metal buttons used for practical clothing fasteners and for decoration can date back to 2000 BC. A popular find among detectorists is a bronze fibula brooch, fasteners used by



The gold and sapphire Middleham Jewel, found with a Garrett detector in England, was first sold at auction for £1.3 million. The Yorkshire Museum later raised £2.5 million to buy back the exquisite Gothic pendant and return it to the UK.

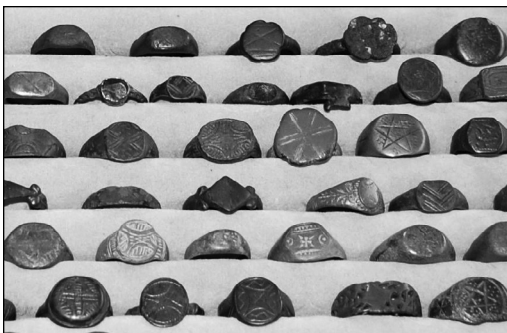


The more cherished bronze fibula brooches (used to secure cloaks and other clothing) are those recovered with intact clasps.

Romans, Celts and other early civilizations for securing cloaks and other garments. Some fibulas can be quite ornate, including even animal figurines in their design. Although most were commonly constructed of bronze or pewter, some fibulas have been excavated that were made of silver and even gold. Military and civilian buttons, buckles and other fasteners are also quite popular to collect. Their shapes, design patterns and metal content vary both by geography and eras of European history, each



Dutch detectorist Leo Kooistra pours out a bucket of thousands of silver rings and necklaces he has found in the Netherlands and in Germany.



These gold, silver and bronze rings were found during 25 years of searching in Europe. Some of the older Roman and Celtic rings in this case date back more than 2,000 years.

piece like a snapshot of daily attire from that period.

Decorative Celtic pieces made from wrought iron and bronze, with elegant Greek-influence designs, date back to the late centuries of the Iron Age. Such pieces of Celtic influence are found mainly in France, Spain, Belgium, England and Ireland. Early Celtic fasteners have been found in rectangular, square, triangular and even butterfly-shaped forms.

Equally coveted are early rings, jewelry, bronze figurines and medallions. Finger rings became fashionable in the middle ages but have been around for thousands of years. They were signs of a person's wealth but were also worn for a wide variety of purposes—mourning, religious, political, ceremonial and even medicinal. Some were set with precious stones and inscribed with slogans of love, faith or strength. There is obviously a special history to finding a gold or silver finger ring that dates back to the Roman Republic era or even earlier.

- **Relics and Tools**

Conflicts have been fought on European soil for thousands of years including, more recently, World War I and World War II battles that occurred over much of this continent. Bayonets, ammunition belts, musket balls, metal uniform pieces and military paraphernalia of all description are found routinely by detectorists in many EU countries.

Most battlefields are considered historic sites. Some hunting clubs, however, partner



These are a few of the nearly 2,000 pounds of German and American military items found by the author and a Garrett search team at a point near Koblenz, Germany. These relics are currently on display in the Garrett Museum in Garland, Texas.



This 9 cm.-long crossbow fibula was worn by a Roman centurion, a high-ranking officer in charge of at least 100 soldiers.



(Above) These recovered bronze artifacts are (left to right) an 8 cm. ax, a 15 cm tool, a 15 cm Celtic ax head from about 1500 BC and a crop cutting tool believed to have originated from the Celts.

(Right) This ancient Roman sporting medallion, dating to about 100 BC, was found by a French detectorist.



with professional archaeologists to serve as the skilled searchers who pinpoint artifacts. For some the thrill of seeing such history unearthed is just as rewarding as finding an object that can be collected and displayed. You can preserve your memories of such finds with photographs and you will know that these artifacts will help educate others when they are put on display.

Be certain you are aware of the laws in your area, particularly sites that have been deemed as archaeological areas before searching for military artifacts. Many other relics of early civilization can be discovered such as tools, pots, thimbles, locks, keys, silverware, decorative tobacco tins, hair pins, figurines, tokens and more.

- **Prospecting and Coastal Hunting**

It may be surprising to some to learn that gold dust can be found in virtually all European countries with the exception of the flat areas of the Netherlands and Denmark. Gold mining is active in France and Spain while serious individual prospectors using metal detectors have



British detectorist John Howland found this Bulgari 18-carat ring set with 24 diamonds at the coast with his *Garrett Sea Hunter*.

taken nuggets up to 35 ounces in recent years from Switzerland and Scandinavia. Panning can also be enjoyed in certain rivers in Finland, Sweden, Norway, Italy, Slovakia, the Czech Republic, the United Kingdom, Ireland, Switzerland, Poland, Austria, Germany and France.

Lakes, rivers and beaches across Europe are especially popular metal detecting destinations. The outer countries are surrounded by bodies of water that include the Atlantic Ocean, the Mediterranean Sea, the Adriatic Sea, the North Sea and the Baltic Sea. It is important to understand the various coastal areas where you might opt to hunt. High and low tide prime searching

times are more relevant for those metal detecting along the Atlantic than for those who sweep their coils along the beaches of the Mediterranean and Baltic seas, which have little tidal movement. Low frequency motion detectors are ideal for dry sand hunting while a multiple frequency (or pulse induction) machine is better for wet sand and hunting in the surf.

Regardless of where you chose to metal detect or what your primary treasure targets might be, the following basic tips and techniques should help improve your success.

DISCRIMINATION AND TARGET ID

For most of us, our time is valuable. Metal detectorists are therefore interested in finding more treasure targets and less junk metal items. For that reason, many searchers employ some form of discrimination to eliminate digging excessive iron rubbish, pop tops, tin cans and other debris.

True All-Metal, non-motion detectors simply respond to all metal encountered by the unit's searchcoil. Veteran detectorists appreci-

ate that the continuous audio feedback of an All-Metal detector allows them to hear every characteristic of their target as they approach and leave it.

Although discrimination, or motion, metal detectors do have a continuous audio feedback, many operators today prefer to instead hunt silently in Discrimination mode until the detector identifies and signals a target. These instruments require that their searchcoils remain in motion in order for their built-in filters to effectively identify target metals. When you hold the searchcoil perfectly still above a target with a discrimination detector, it loses the signal. Discrimination machines with pinpointing abilities are basically being switched briefly into an All-Metal mode to allow you to continually hear the target response as you move the searchcoil over the target.

It is important to note that where a treasure target will hit on your Target ID scale is based on its conductivity, permeability, thickness, size, shape and ground orientation. The target's conductivity is its electrical characteristic. The



Discrimination detectors can help discriminate iron items that might litter an area in which you wish to recover coins. Note in the illustration above that larger searchcoil sizes can prevent good targets from being detected to the effect of “iron masking.” A smaller, sniper coil would improve search results in this situation.

object’s magnetic characteristic is called permeability, or whether a magnet will attract this substance.

European coin hunters will quickly learn that their target’s metal composition is only part of the equation of how their detector’s Target ID system reports their find. For example, a thick Spanish silver real will register solidly to the right side of an ID scale (or as a higher number). An equally pure silver small coin that

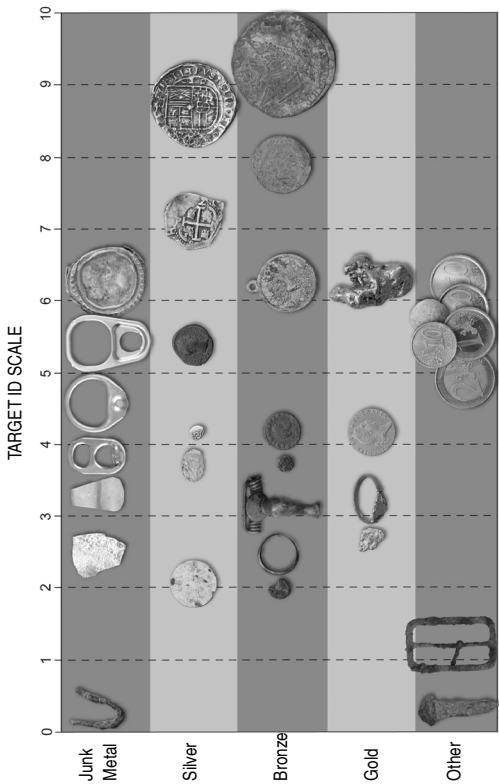


These highly conductive silver coins register quite differently on a Discrimination metal detector's Target ID scale due to their size and thickness. (See Target ID chart at right.)

was hammered thin by ancient Roman metalworkers will register much lower on the scale.

This is important to understand because ancient bronze, silver and gold treasure targets can register quite differently. The use of discrimination thus becomes a more difficult decision. If you choose to eliminate pull tabs, pop tops or bottle caps, what *good* treasure targets are you also eliminating?

Study the discrimination chart on page 33 to answer this question. Notice that below each of the junk metal items in the top row you would also find various Old World coins and relics that



would register the same. Various Discrimination, non-motion metal detectors display their Target ID scales from 0 to 12, 0 to 100, 0 to 10, etc. Regardless of the scale your detector utilizes, the results are the same: notch out the pull tabs (as an example) and you can miss small gold Roman rings, smaller fibulas and tiny hammered coins. Make sure you understand what your potential “loss” can be before selecting any discrimination.

Some European detectorists therefore opt to eliminate out a very few select discrimination notches such as the far left notch for iron targets. Even with only minimal iron discrimination, there are iron buckles or Roman square nails that are desirable for some detectorists. In the end, target discrimination is a personal choice based on what items you are willing to risk losing. You can conduct tests with various European treasure targets to see how the targets’ properties affect the Target ID reading.

The *thickness* of a target is important. The thicker a conductive object is, the more ability it has to reflect back the searchcoil’s magnetic

waves. Detection depth also increases with the *size* of the target object. *Target position* and *target shape* also come into play in determining target identification. The more surface area that faces a searchcoil, the better the detector will register the target and at greater depths. A smooth surface makes a good conductor of electrical energy. A flat, smooth, ring-shaped object thus make a better conductor than a relic with rough surfaces and irregular shape.

EUROPEAN HUNTING TIPS

Part of finding history is understanding history. Detectorist Stefano Morsiani of Italy makes an obvious but succinct point, “If you search in a place where there is no history you will find nothing. If you search in a place that has good history you have the *possibility* of finding something.”

- **Research Pays Off**

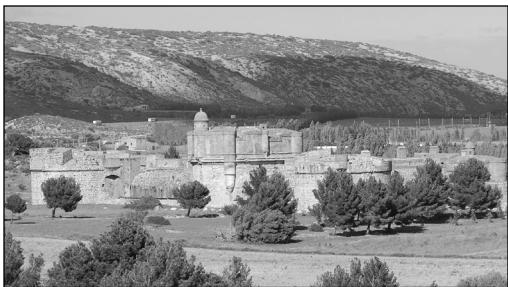
One of the keys to success is conducting the proper research to find potential hot spots. Talk to older residents to learn where thriving settle-

ments once stood, where fairs were held, where people congregated for other social events or the location of an old farmer's market. If you hope to find medieval artifacts or ancient Roman or Celtic coins, your odds will be much better if you know their history. Visit a library to study old maps and books to learn how and where such ancient people migrated through Europe. Natural waterways and fertile land areas are obviously places where the earliest people would have settled.

Perform a field reconnaissance on farmland during the summer while crops are growing. Broken shards of old pottery and other rubbish in the field can indicate an early settlement. With the landowner's permission, you can return to this field in the fall after crops have been harvested.

- **Learn the Laws**

Many European countries have adopted strict laws concerning metal detector use, particularly regarding items considered to be antiquities. Because the classifications of which



There are tens of thousands of castles, some in complete ruins and some now private residences, across Europe. Just imagine the old coins and relics that could be in the vicinity!

items are considered to be historically important vary by country and even by regions within countries, it is crucial that you learn such information before taking to the field.

In the United Kingdom, searchers who find any item considered to be treasure must report it to local field liaison officers within 14 days. Persons failing to do so can be fined or even put in jail for up to three months. In return for properly reporting historical finds, these people will be offered fair market value for their treasure. Historians and archaeologists benefit from this



This European rallyist obviously knows the advantage of using a pair of headphones while metal detecting.

sharing of knowledge, and the door to future metal detecting is thus left open.

Other European countries are not as open for hobbyists. In Greece, metal detecting is forbidden on land, where all artifacts belong to the state. Metal detecting has all but been outlawed in other countries, where only individuals with specific permits from the government can conduct searches.

- **Use Headphones and a Pinpointer**

Veteran detectorists know that the faintest, deep target signals are hard to hear with the naked ear. This becomes especially true if you are hunting on a windy beach or in a noisy city area. Headphones allow you to concentrate on your search since you ignore external sounds. Your detector will also be silenced to other people around you in public places.

Most treasure hunters who have used a high-quality pinpointing metal detector such as the Garrett *PRO-POINTER* will tell you that they won't go into the field again without one. New detectorists often struggle to find a metallic target indicated by their ground search detector. Even the most grizzled hunting veteran will struggle at times to find smaller targets in extreme soil conditions. A quality pinpointer will speed target recovery, accurately locate small objects, identify multiple targets lying in close proximity and prevent the need for digging large excavation holes.

When you begin using a pinpointer, you may be surprised at how often it will announce





Belgian detectorist Franco Berlingieri uses his *PRO-POINTER* to scan the side walls of his excavation to look for secondary targets (*facing page*). Above, he sweeps his pinpointer scraping blade through the excavated soil to pinpoint a tiny coin target.

the presence of secondary or smaller targets that you were not expecting. Scan the side walls of your excavation hole carefully before filling in your hole. If you are without a pinpointer and find yourself struggling to find an elusive tiny target, try to use your searchcoil as a pinpointer. Once you have determined that the object is out of the ground, scoop a handful of earth from the



British detectorist Matt R. shared this photo of a 14th century Edward groat which he scraped with his spade while unearthing the coin. He now warns his friends to use a pinpointer to avoid such damage to coins during their excavation.

excavation pile from which you are receiving a signal. Pass the handful of soil directly in front of your searchcoil about 2 to 3 cm. away. Make sure that you are not wearing any metal objects such as a ring or watch on your hand passing the dirt in front of the coil. Continue scooping and inspecting dirt until your detector responds.

- **Join a Club and Attend Rallies**

The quickest way to learn more about this hobby is to join a local metal detecting club. Most have regular meetings in which members share stories and present their best finds from the past month. Clubs offer you the chance to make new friends who share similar interests



Belgian detectorists await the starting signal at a summer 2009 rally. *Photo courtesy of Franco Berlingieri.*

and to join others in hunting properties that you might not have been able to gain access to on your own.

Metal detector clubs and detector retailers often hold annual or semi-annual rallies in the field. Hobbyists gather for a day or two of fun, food, fellowship and competitive hunting. Tokens or coins are usually planted in the hunt area by the rally organizers before the event. Detectorists are then unleashed for a given



Russian detectorists eagerly begin scouring the field at the start of a fall 2008 rally near Moscow.

period of time to scour the fields with their machines. Prizes are awarded to those who find certain tokens or other planted items.

European rallies are often held on private properties in history-rich areas which might never have been searched with metal detectors. In addition to unearthing the planted items, metal detectorists quite often find ancient coins, rings, buttons and various artifacts from modern times back to the Iron Age. Dozens of French coins dating back as far as the early

1600s were found by detectorists in July 2009 at a rally near Toulouse, France. In England, two detectorists participating in the Newburry Rally of 1997 dug more than 75 large silver coins. Many artifacts dating from the Roman era were unearthed by hobbyists participating in a 2009 rally near Torreneva, Spain.

You can learn more about European rallies and metal detector clubs by searching the Internet or reading about upcoming events in some of the metal detecting magazines published in Europe.

- **Involve Your Family**

Metal detecting can be enjoyed during any trip or family vacation you take across Europe. Leo Kooistra of the Netherlands has carried his detector on trips into Germany and other countries, where he has collected literally hundreds of gold rings from swimming holes.

Buy a detector for your children and engage them in a sport that will encourage them to get off the couch and enjoy the outdoors. They will get good exercise walking and digging targets

and may even develop a new interest in history. By the age of five, youngsters can operate basic metal detectors such as Garrett's *ACE* models.

Some children who once enjoyed digging contemporary coins in the park with a metal detector graduate as archaeologists with a special understanding of metal detectors.



This family enjoyed a fun day of metal detecting together at a recent rally in France.

Your metal detector can be a great source of stress relief for your family on the weekends and while traveling. You simply never know what interesting items you might unearth. It's the thrill of the chase that excites as much as the success of the catch.

SOME PERSONAL EXPERIENCES

During my opportunities to metal detect in Europe, I learned that successful searching is the same as anywhere else in the world. Your persistence and patience in the field, combined with effective research prior to hunting, combine to increase your odds of finding nice coins and relics. Here are a few other tips—some perhaps obvious—that I employed while detecting for European treasures.

- **Start by searching in a place where history is likely to be.** Treasure, of course, can be found anywhere if you are happy to find modern euros and other recently lost items. If your goal is to find Roman, Celtic or other Old World items, then you should obviously start by hunt-

ing areas where such people once lived. Your odds are simply better.

Study the history of the area where you plan to visit. Where were the oldest villages or settlements? In the earliest of times, people likely settled in naturally fertile areas where the soil would yield bountiful crops. Water sources (natural lakes and rivers) were also essential to survival in ancient times. Homes, forts or even castles were erected over time. In some cases only the faintest evidence of a building's stone foundation might remain.

In other cases, where a structure is well known to have existed you can search the areas surrounding it. I spent a week one time just to search the area around an early English fort site used in the late 1700s to defend against French troops. I was by myself and I literally worked from dusk to dawn to make the most of my limited time.

By the end of the week I had accumulated some 500 relics. These included handmade lead gaming pieces, coins, musket balls and all sorts of projectiles, uniform buttons and two gold

officer's cap emblems, one of them a gleaming beauty. Another interesting relic found on this trip was what I believe to be an early soldier's ashtray that had been formed from 1/8" lead sheeting that was used as ballast in a ship's hull.

My preferred metal detecting method was in the All-Metal mode with my sensitivity set to detect as deep as possible. Nothing was overlooked. Fortunately, I did not have to fight heavily mineralized ground conditions in this area. Because of this fort's somewhat remote location, I had little tourist trash (cans, pop tops) to contend with.

- **Study the terrain in the location where you have elected to hunt.** Imagine where coins or relics would most likely be lost, hidden or naturally deposited by the effects of rain, erosion and time. That is exactly how I started my scanning of this English fort site on my first day. There had once been a moat that surrounded this fortification and an old dirt mound about six feet in height was still present.

This, I decided, was the best place to start looking. Sure enough, I had my first signal atop

this hill in little time and the signal coming through my headphones was almost enough to blow out my eardrums! The target, pinpointed at about eight inches, was soon found to be a virtually pristine British Monmouthshire 57th Regiment breastplate.

• **Exercise care while recovering your treasure targets.** The story of how I recovered one of the two gold officer's cap emblems near this fort is worth mentioning. It was on my last day of hunting and the dusk was approaching. Near the remnants of an old stone wall, I picked up a good signal and began to dig. The ground was very tough here and I had to use a pick to chop through the soil. I was exhausted after more than 12 hours of hunting in the sun with only a sandwich break. In my haste to find the source of this signal before dark, I ended up destroying my treasure. Upon the last swing of my pick, I saw a glimmer of gold and knew that I had chopped right through it. The gold cap emblem was smashed by my retrieval pick!

I'll never forget this "haste makes waste" lesson. Since that time, I have always made it

a point to use a quality pinpointer to prevent damaging a coin or artifact with my shovel.

• **Treasures can sometimes be found in less obvious places.** For example, I've learned to scan attics, basements, floorboards and even walls in old homesteads to look for hidden caches. During one of my European excursions, we obtained permission to hunt on private property that backed up to a famous 19th century battleground.

Each member of our group found musket balls this day. Noting one particularly large old tree stump, I ran my detector around the rotting old stump. Sure enough, the detector sounded off and I began to hack into the stump. We retrieved a number of smaller lead balls, believed by our group to be pistol shot. In an area of heavy shooting, it is only natural that trees will catch their fair share of flying metal.

• **Be aware of the dangers of more modern military artifacts.** Years ago, I made a hunting trip to an area near Koblenz, Germany. Some of our German friends were proud to show us various World War II German Army relics they



This ammunition clip was discovered by the author near the site of a World War II battleground in Germany.

had discovered with their metal detectors.

We returned to one of these areas and I was thrilled with the number of items we were able to detect. In all, our detecting team recovered an estimated 2,000 pounds of relics. We dug up countless bullets and ammunition clips as well as some helmets and even hand grenades. Such military artifacts should be treated with great caution. When in doubt about discovered ordnance, notify your local authorities versus at-

tempting to dig it up. European antiquity laws have become more stringent regarding exactly how such discoveries must be reported. Always follow your country's law regarding treasure recovery.

• **Jump on an opportunity right away when it presents itself.** I can't begin to tell you how many times I've kicked myself over great treasure hunting opportunities that I've let get away from me. We found the stone wall ruins of old stage coach stop one evening near dusk. We had no time to detect this day but planned to return again before our trip ended. Well, one thing led to another and it didn't happen.

People may offer to let you hunt on their property. If you wait too long to take advantage of an offer, the property might pass hands or the landowner might have a change of heart. *The lesson here: don't wait!* You may never make it back to that particular spot again for various reasons; so take advantage of an offer while it exists.

The caretaker of an old castle in Spain we visited offered to let me come back sometime

and do some thorough searching. Knowing how things often worked out, I decided to at least scan a few minutes before we had to leave. In the end, we did not make it back there but I did make a great recovery during that short time of searching: an ancient crossbow point. For once, I was proud of myself for seizing the moment!

• **Never pass up a chance to scan.** Once at a northern Canada silver mine in Ontario where we had been searching, our truck horn sounded signaling tailgate lunch break. As is my usual scanning method, I continued to swing my searchcoil as I headed for the truck.

I heard a moderate signal and began digging into an extremely tough, concrete-like mine tailings road bed. After about an hour of digging, I unearthed three large chunks of near 100% silver. One of these weighs nearly 50 pounds. If I had not scanned along ahead of me that day as I walked toward the truck, I would not have made the silver discovery.

CLEANING YOUR TREASURES

Different metals react differently to the effects of the soil or water in which they have been lying until you recovered them. You must decide how or if you want to clean away any corrosion or oxidation from your European recoveries. Copper and copper alloys often emerge from the ground with various colored *patina*—the result of years or centuries of external chemical influences on the surface of the coin or artifact.



These two silver Roman coins show a fair amount of tarnish but great care must be taken if you elect to clean such a coin. These coins are very rare, dating to about 379 to 395 AD, and are worth about 4,000 euros today.



Old silver coins seen soaking in a sugar-water solution. Soaking silver coins in a 1:4 ratio mix of citric acid and distilled water can help remove light tarnish.

The most valuable Roman or Celtic coins can be damaged by simply trying to rub off layers of old dirt with your thumb and fingers. Preserve the potential value of your ancient coin finds by leaving the dirt on them until you are able to work carefully with them later. Place the dirty coin into a protective pouch or cotton-filled container in your treasure pouch while you are still hunting in the field.

The safest process is to trust your potentially valuable finds to a person who has experience in cleaning such items. Be wary of testing a new process that could completely ruin your precious find. Experts advise not to clean the patina from antique bronze because that might ruin its value.

Pure silver coins and quality silver alloys tarnish easily, but the method for cleaning them depends upon the level of oxidation present and the quality of the silvery alloy. Various commercial silver cleaning compounds are sold by coin dealers and other retailers.

Warm water, soap and a soft-bristle brush can be used on many coins and artifacts—such as gold, brass, copper, nickel, lead, tin or aluminum—to gently remove dirt and minor corrosion. Rinse away soap residue and dry each piece thoroughly before preserving it.

To prevent corrosion, relics and coins should never be left touching each other. Store them in coin sleeves or protective trays.

EUROPEAN CODE OF ETHICS

Several codes of conduct have been written by metal detector groups in Europe and in the United States over the years. More recently a voluntary “Code of Practice for Responsible Metal Detecting in England and Wales” has been adopted by a number of organizations, including the British Museum and the Council for British Archaeology. This code states:

Code of Practice for Responsible Metal Detecting in England and Wales

Being responsible means:

Before you go metal-detecting:

1. Not trespassing; before you start detecting, obtain permission to search from the landowner/occupier, regardless of the status, or perceived status, of the land. Remember that all land has an owner. To avoid subsequent disputes it is always advisable to first get permission and agreement in writing regarding the ownership of any finds subsequently discov-

ered (see www.cla.org.uk or www.nfuonline.com).

2. Adhering to the laws concerning protected sites (e.g. those defined as Scheduled Monuments or Sites of Special Scientific Interest: you can obtain details of these from the landowner/occupier, Finds Liaison Officer, Historic Environment Record or at www.magic.gov.uk). Take extra care when detecting near protected sites: for example, it is not always clear where their boundaries.

3. You are strongly recommended to join a metal detecting club or association that encourages cooperation and responsive exchanges with other responsible heritage groups. Details of metal detecting organisations can be found at www.ncmd.co.uk or www.fid.newbury.net.

4. Familiarising yourself with and following current conservation advice on the handling, care and storage of archaeological objects (see www.finds.org.uk).

While you are metal-detecting:

5. Wherever possible working on ground

that has already been disturbed (such as ploughed land or that which has formerly been ploughed), and only within the depth of ploughing. If detecting takes place on undisturbed pasture, be careful to ensure that no damage is done to the archaeological value of the land, including earthworks.

6. Minimising any ground disturbance through the use of suitable tools and by reinstating any excavated material as neatly as possible. Endeavour not to damage stratified archaeological deposits.

7. Recording findspots as accurately as possible for all finds (i.e. to at least a 100m², using an Ordnance Survey map or hand-held Global Positioning Systems (GPS) device) whilst in the field. Bag finds individually and record the National Grid Reference (NGR) on the bag. Findspot information should not be passed on to other parties without the agreement of the landowner/occupier (see also clause 9).

8. Respecting the Country Code (leave gates and property as you find them and do not damage crops, frighten animals or disturb

ground-nesting birds, and dispose properly of litter, see: www.countrysideaccess.gov.uk)

After you have been metal-detecting:

9. Reporting any finds to the relevant landowner/occupier; and (with the agreement of the landowner/occupier) to the Portable Antiquities Scheme, so the information can pass into the local Historic Environment Record. Both the Country Land and Business Association (www.cla.org.uk) and the National Farmers Union (www.nfuonline.com) support the reporting of finds. Details of your local Finds Liaison Officer can be found at www.finds.org.uk, email info@finds.org.uk or telephone +44 (0)20 7323 8611.

10. Abiding by the provisions of the Treasure Act and Treasure Act Code of Practice (www.finds.org.uk), wreck law (www.mcga.gov.uk) and export licensing (www.mla.gov.uk). If you need advice, your local Finds Liaison Officer will be able to help.

11. Seeking expert help if you discover something large below the ploughsoil, or a con-

centration of finds or unusual material, or wreck remains, and ensuring that the landowner/occupier's permission is obtained to do so. Your local Finds Liaison Officer may be able to help, or you should seek the advise of an appropriate person. Reporting the find does not change your rights of discovery, but will result in far more archaeological evidence being discovered.

12. Calling the Police, and notifying the landowner/occupier, if you find any traces of human remains.

13. Calling the Police or HM Coastguard, and notifying the landowner/occupier, if you find anything that may be a live explosive: do not use a metal-detector or mobile phone nearby as this might trigger an explosion. Do not attempt to move or interfere with any such explosives.

SPECIAL ADVICE

- **Take advantage of new metal detector technology.** There's more treasure to be found today than you could find 40 years ago. I know this to be true because the technology of today's metal detectors is superior to those I used decades ago. Deeper ground penetration and better target discrimination allow European detectorists to find items they simply could not detect years ago.

- **Use the metal detector that is best able to handle the soil conditions you expect to encounter.** Single frequency (VLF) detectors are more sensitive in the most common ground environments. They offer more accurate and reliable target identification and discrimination. Multiple frequency detectors (such as Pulse Induction models) provide the best results over mineralized ground and in saltwater environments due to their ability to ignore minerals by virtue of their pulse characteristics. Target ID accuracy suffers with PI detectors, primarily in the region of iron identification.

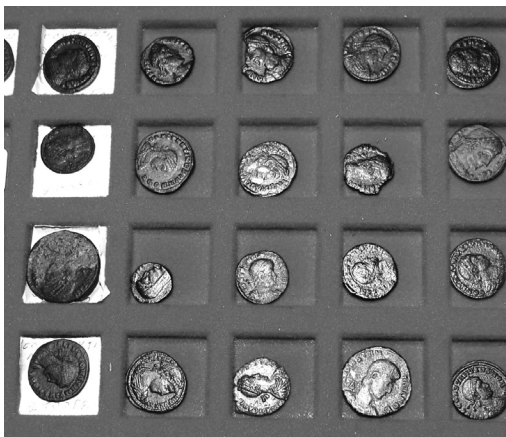


Use an overlapping search pattern to thoroughly cover areas where you have discovered good coins or relics in the field.

- **Take the proper time to thoroughly learn your metal detector.** My recommendation is to hunt in the All Metal (or Zero discrimination mode) with any detector that is new to you. Dig up everything you detect. In my opinion, you should not expect to become proficient with any new detector until you have hunted diligently with it for at least 100 hours.

- **Be methodical in your search area.** As you walk a freshly-plowed field, establish a search pattern for thoroughly covering the area. Even a previously-worked over area can be productive if you give it due diligence. Be sure to overlap your swings as you advance your searchcoil. One suggestion is to walk a zone back and forth with your searchcoil overlapping the previous area by at least one-third of its area.

- **Concentrate on hot-spots.** One you have found an area with more than one nice coin or relic, grid out this search area and work it more carefully to see if other items exist in this spot. You might try switching to a larger searchcoil and/or increasing your detector's sensitivity.



Document your favorite European recovered coins with notes on where you found them. Coin display trays such as this are a good way to keep your finds separated, thus preventing corrosion.

Sometimes you can find more of the same good items buried even deeper. Be sure to use headphones to pick up those faint signals.

- **Document your recoveries with photos.**

Many significant treasure finds in Europe must be turned over to proper authorities due to antiquities laws. The detectorist is often paid a fair

market value “reward” for their recovery but this may not be the case in all European countries. Take photographs of your treasure so that you can keep an album of your best finds.

- **Enjoy your hobby!** Metal detecting is now a popular hobby in Europe and I believe it will continue to grow. Since modern technology has created powerful metal detectors that even young children can use to find coins, it is truly a sport that your whole family can enjoy. My advice for European hobbyists is to take a couple of metal detectors along on your next vacation. Treasure can be found anywhere that people have lived, camped, played, worked or rested.

What better way is there to enjoy fresh air and sunshine? Because European soils can contain literally thousands of years of history, you truly never know what you’ll find until you get out there and enjoy this hobby!

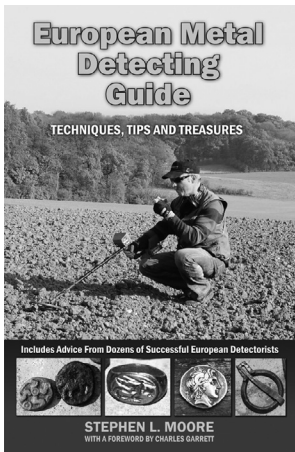
I wish you happy hunting!

COMING SOON...the rest of the story!

If this field guide sparked your interest about metal detecting in Europe you will want to read the full-length RAM Books title. Ask your dealer about this informative new title in early 2010.

Highlights include:

- Hundreds of full-color photographs
- 5.5" x 8.5" size
- Field tips from European metal detectorists
- Explanation of detector and searchcoil technology
- Illustrations of proper detector techniques
- European treasure laws information



European Metal Detecting Guide

Preview of Pages



Dozens of pages of full-color treasure photos with descriptions of the items' age or value.

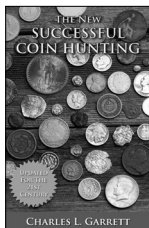


Photo exposes from the field, such as this French rally experience.

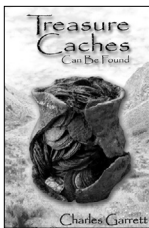
Proper search techniques with illustrations.

THE GARRETT LIBRARY

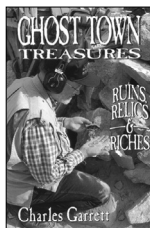
These standard-size 5.5" x 8.5" format books offer treasure hunting techniques, hints and history from Charles Garrett and other RAM Books authors. Each book is soft cover format unless otherwise noted.



PN 1501500



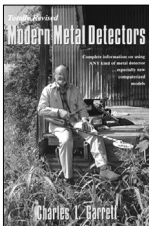
PN 1508600



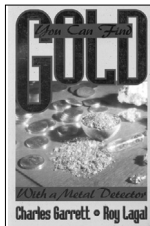
PN 1508200



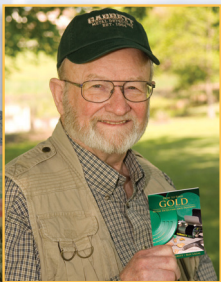
PN 1508300



PN 1501700



PN 1545500



Charles Garrett

Master treasure hunter and author



Ram Publishing Co.

A subsidiary of Garrett Metal Detectors

1881 West State Street

Garland, TX 75042

PN 1546200

ISBN 978-0-9818991-7-6



9 780981 899176

5 0395

