

# Detector Field Test

## Tesoro Compadre & Laser Scout

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The Compadre, Scout and accessory  
8in concentric coil and lower stem

For many experienced detectorists it is easy to forget the dilemma that faces the newcomer to the hobby when it comes to the vital question of which machine to buy. It is generally accepted that your first machine will probably be in the lower price range and will be a simple turn-on-and-go detector with which you can “learn the ropes” before committing yourself to any greater expense. There are of course exceptions to this. Entries to the prize draw questionnaire recently included in **Treasure Hunting** magazine reveal that most beginners will be looking for a detector in the £100-£250 price range. However, many of the beginners who returned completed questionnaires stated that they needed more guidance in selecting their first detector from the many that are available in that price range.

It is not my intention here to go too deeply into the ways and means of making that choice. But no matter what stage you are at, the one important factor that remains consistent when buying a new detector is to gather as much information as you can, and from as many different sources as possible, before making that all important decision. Another good piece of advice is to

take your time when making this choice. There’s no rush....most of what you will be looking for has been in the ground for a long time and won’t be going anywhere in the immediate future.

Carefully consider what you want from metal detecting and then select a machine to meet those requirements. That single decision will determine your future attitude towards the hobby and the future satisfaction that you will derive from it.

Going back to the responses to the questionnaire, comments were made such as “I’m new to the hobby. What’s the deepest machine I can get for my limited budget?” and “As a newcomer to the hobby, field tests all seem to be saying the same, that the machine being tested is the deepest. How can I choose?”. As a result of this, over the coming months we will be looking at some of the newer models currently available in the lower to mid price ranges.

One point that should be commented on, as so many readers raised it, concerns the matter of depth. It is natural to think that depth is the most important factor when choosing a detector; however, this is not necessar-

ily the case. If you are searching inland (as opposed to beaches) most of what you will find exists at between 2 to 8in below the surface, and that is well within the capabilities of most detectors.

Of course, it is not quite that simple. Other aspects come into play governing whether or not you will locate objects. These include the size of the target, the material it is made from, ground mineralisation, junk contamination, and whether the detector is correctly set up for the conditions prevailing.

Experienced detectorists will be aware that what is more important than depth is the detector’s ability to discriminate between one metal and another and how effective is its sensitivity control. The latter ultimately determines the depth the signal can penetrate the ground and, sometimes, low settings will allow the detector to go deeper than high.

The adverse weather conditions at the end of last year, continuing through into the current foot and mouth disease outbreak has meant a pretty devastating period for most detectorists with regards to gaining access to land. During this period two new detectors, both

in the lower price range, have slipped onto the market almost unnoticed. What makes this even more surprising is that they both come out of the Tesoro/Laser stable where - because of the reputation they have established with regard to their sensitivity and discrimination capabilities - news of new models invariably precedes their arrival in the dealers' shops.

## Tesoro Compadre

The first of these new models is the Compadre. Previously marketed as the Amigo II, the Compadre has been brought into line with other detectors in the Tesoro range by the replacing of its straight stem and detachable speed handle, with a three-piece pole and cranked handle.

The now familiar Micromax-style control box mounted on top of the handle houses one 9-volt PP3 battery that has a life expectancy of 10-20 hours. The detector comes fitted with a 7in concentric search coil that is hard wired into the control box. Designed as a silent search starter machine for all ages, the Compadre weighs just 2lb and can easily be used by anyone including the younger members of the family. One control knob - which combines the on-off switch, battery test and discrimination level - makes this a true turn-on-and-go machine suitable for use in most conditions. Perhaps the only exception is salt water beach detecting, although the Compadre will still work effectively on the upper part of the beach in the dry sand.

Setting up the detector is simplicity itself. You just switch on by turning the control knob in a clockwise direction. This will start the battery test signal, which - if the battery is in good condition - should last up to about 5 seconds. The first position encountered when rotating this control is the all-



The Compadre control box

metal mode, followed by "Iron", "Foil" and continuing through to "Max". At the highest level you will be eliminating almost everything, including wanted items. Decide which level of discrimination you wish to employ (the lowest that the conditions of the site allow) and the detector is ready for use.

So how did it perform when put to the test? To start with I decided, following popular request, to carry out some bench checks using carefully selected items as a control. Much debate goes on as to the worth of this type of check, but - like it or not - it is in certain circumstances the only guide to a detector's performance when you are considering a new or different machine. Very few dealers are happy to let you take away and try out a detector before purchase and my own experience of having worked in a detector retailers entitles me to have a "feel" for what the purchaser wants to see and hear. At best the checks are simply a guide; at worst they at least give you an indication of how to set up the detector and the opportunity to get used to the controls.

For the purpose of my checks I decided on the following items to give an "across the range" type of target that could turn up on inland sites (I have

left out foil and ring pulls simply because of the many different responses to the differing types that are available): a bronze quarter stater, a silver hammered penny, a lead cloth seal, a small buckle, a gold ring, a pre-decimal penny, and a new 2p piece. The group was completed by the addition of a large Roman iron nail. With the discrimination set to all-metal and then to iron the following in-air depths were achieved - see table 1.

As you can see from the table, my checks showed that after increasing the discrimination from "all-metal" to the first level at "Iron", four of the items increased in the distance they could be picked up from the search coil (which was unusual), while the iron nail was eliminated.

The new, year 2000 penny with its high iron content was expected to give a "broken" signal but showed no sign of breaking up until I reached the "pull tab" stage of rejection. By continuing to raise the discrimination level I lost the signal from the gold ring at the "Foil" setting. All the rest of the "good" targets remained positive until the final setting at "Max" when I lost all of the signals.

This was pretty much what I would have expected from this manufacturer so all that I had to do now was try the Compadre in the field for a true performance check. The site chosen hadn't been searched since October last year due to flooding and then the "other" problem. It had been left in a rough ploughed state but - due to the weather conditions over the winter - the ground had broken down nicely (albeit a bit soft for the first couple of inches). I had three days to work the field (my favourite Roman site), but to be honest I was expecting quite a bit of interference resulting from the highly mineralised soil and the fact that this detector had no sensitivity control. My search started in the all-metal mode and it wasn't long before the iron started to appear. Dug targets included everything from an old horseshoe to small rusty nails - all the things I would normally try to cut out. However, as



The items used as controls for the bench tests.

Table 1

	All-Metal	Iron Reject
Bronze quarter stater	5in	5.5in
Hammered penny	6.5in	6.5in
Lead cloth seal	6.5in	7in
Small buckle	6.5in	6.5in
Gold ring	5.5in	5.5in
Pre decimal penny	7.5in	8in
New 2p	7in	7.5in
Roman iron nail	7in	eliminated

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soon as the discrimination was turned to the "Iron" elimination setting the story was quite different. I dug no more rusty iron (excluding a large chunk of broken plough share), and the expected "chatter" was obvious by its absence.

Over the three-day session I recovered a number of corroded Roman bronze coins together with some broken fibula brooches. Lead scrap was plentiful. None of these items came from deeper than 6in apart from the large chunk of iron. Discrimination was everything you would expect from the Tesoro range and as a result I enjoyed using the Compadre.

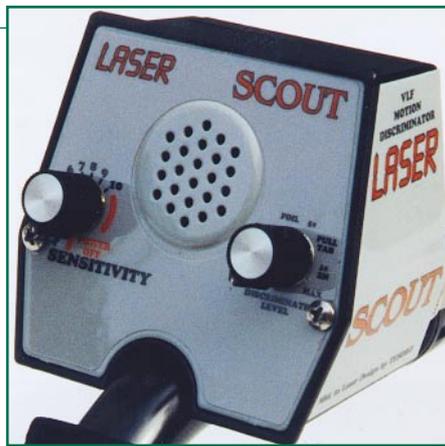
Signals were loud and clear and there was no mistaking the "iffy" iron signals from the good ones. Although the small search coil and the light weight of this detector took a little getting used to after my heavier, more sophisticated machines, I found the Compadre certainly more comfortable to use than its predecessor. It should be kept in mind that this is a motion detector intended for beginners, children or the fun user. Considered against these factors I am sure the Compadre will convince the prospective purchaser that it is more than capable of doing a good job. I believe this model will prove a great stepping stone into the detecting world for any beginner purchasing it.

### Laser Scout

The Laser Scout to all intents and purposes is very similar to the original Silver Sabre of the 80s, apart from its build. The Scout has the new Micro-max-style housing, built-in mineral rejection, three-piece pole, and the familiar black and grey livery of models in the Laser range.

This detector is a silent-search, two-control motion machine. The first control switches the detector on and off, brings in the battery test, and also serves as a rotary sensitivity control. The control is marked in graduations from "Min" to "10" after which you enter the red maximum sensitivity area (not intended for normal searching but as an aid when you get one of those difficult to identify signals). The second control, discrimination, selects the amount of rejection that you want to use. Starting in the black "All Metal" position it progresses clockwise through "Iron", "Foil", "Pull Tabs" to "Max" (where virtually nothing at all will be picked up).

The Scout is powered by a 9 volt PP3 drop-in battery (no wires to worry about) and comes with a 7in slim line 2D widescan coil as standard (although



The Scout control box

interchangeable accessory coils can be fitted for greater flexibility). Weighing just 2.5lb this detector is not going to break anyone's arm.

Assembly is the same as the Compadre and the operating instructions are simple and easy to understand. Again, for the purpose of this report, I used the same set of items selected for the Compadre for the bench checks. As the detector I was supplied with came with an optional 8in concentric coil I also carried out a comparison between the two different coils. The results, with sensitivity set to "10", were as follows in Table 2.

Table 2

	7in coil		8in coil	
	All-metal	Iron reject	All-metal	Iron reject
Bronze quarter stater	5.5in	5.5in	8in	8in
Hammered silver penny	7in	7in	7.5in	7.5in
Lead cloth seal	7.5in	7.5in	7.5in	7.5in
Small buckle	7in	7in	6.5in	6.5in
Gold ring	6in	5.5in	7in	5.5in
Pre-decimal penny	8.5in	8.5in	8.5in	8.5in
New 2000 2p	8in	8in	8in	7.5in
Roman iron nail	7in	eliminated	7in	eliminated

The results of these bench checks are interesting when you compare the results against the coil sizes, but as to the worth of each coil "in action" that remained to be seen. It was very noticeable that targets picked up by the 7in widescan coil extended right to the edge of the coil (and slightly beyond) giving as wide a search area as on the 8in concentric coil. I didn't try the test items "in ground", as recently disturbed ground does not provide valid results. Both detectors were fitted with new batteries.

For the field test of the Scout I asked Jamie Stolworthy (an experienced detectorist) whether he would like to give it the once over. He willingly agreed,

He decided to take the machine to a medieval site that has produced a fair

number of hammered silver coins in the past, along with the usual buckles, weights and buttons. Jamie's report is as follows:-

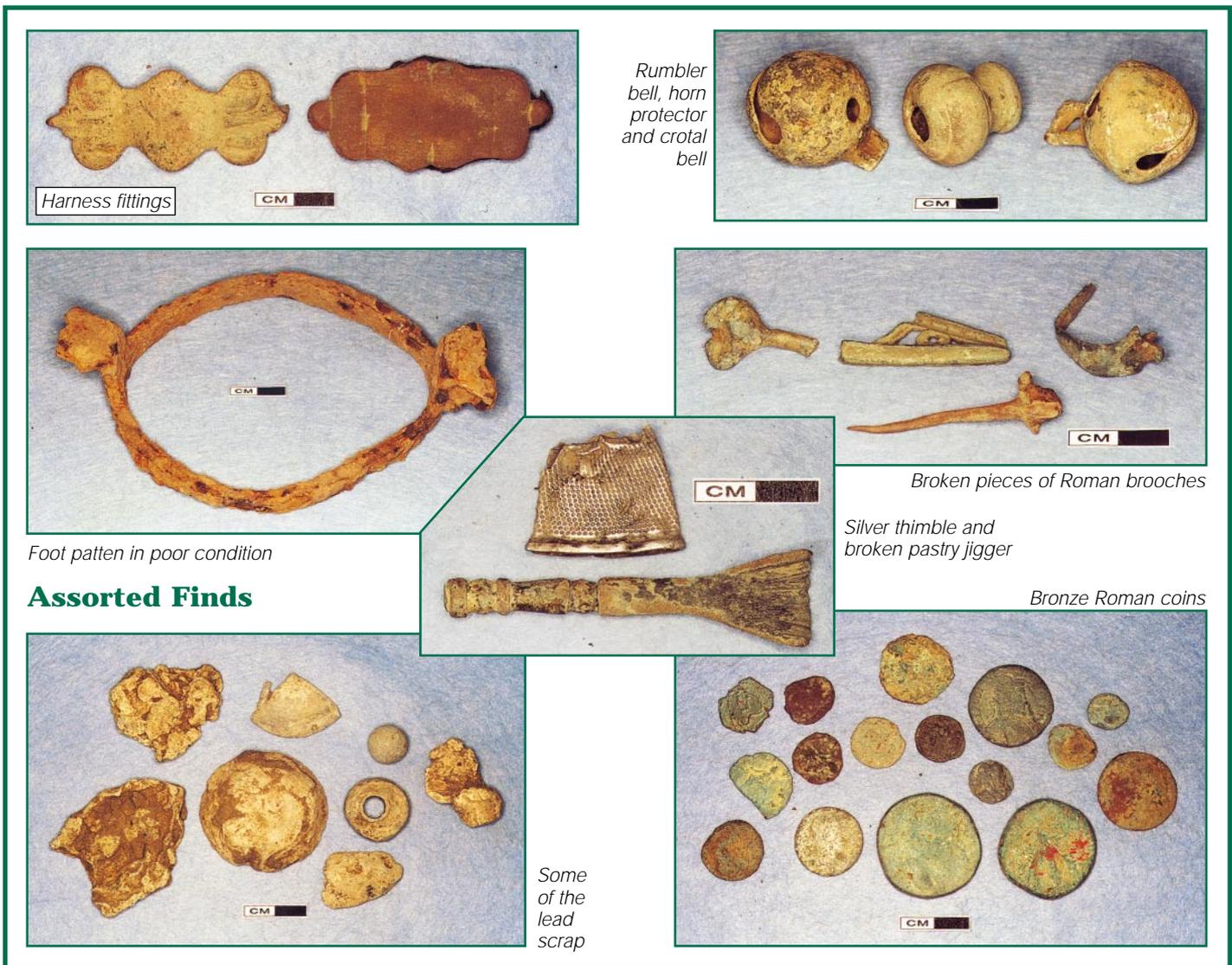
"I was pleased to be asked to use the Scout to assess its capabilities and suitability for beginners and/or novices as I started my detecting career using a second-hand Tesoro. I now normally use a higher spec detector than the one supplied and it would be good to get back to using a basic turn-on-and-go machine. I started by using the 7in coil that comes as standard and set the sensitivity to "10", the highest number before entering the red section on the scale. With the discrimination control set at the "Iron" elimination setting, I started a methodical search along the headland of the field.

"I was surprised how light the machine felt in my hand and it took a little time to get used to the small coil after having used a larger 10in coil on my own detector for some time. It wasn't long before I received my first signal. This took the form of a loud clear sound and when I dug down it produced a nice crotal bell. This was followed shortly afterwards by a brass harness fitting with a piece of leather

still attached. I was pleased with these results from the small coil as the ground I was searching provided far from ideal search conditions. Although faced with deep tractor tyre ruts from the wet conditions and patches of nettles, I was able to weave in and out of these without difficulty.

"At this stage I was experiencing very little chatter through the headphones, although I did get a couple of "good" signals from a foot pattern and a large piece of aluminium foil that had once contained a meat pie.

The chatter was eliminated when I turned the discrimination up to the "Foil" mark as a test before turning it down again. I'm one of those people who use a detector at the lowest possible level of discrimination without getting continual chatter from ground



Harness fittings

Rumbler bell, horn protector and crotal bell

Foot patten in poor condition

**Assorted Finds**

Broken pieces of Roman brooches

Silver thimble and broken pastry jigger

Bronze Roman coins

Some of the lead scrap

conditions. I therefore expect to pick up a bit of iron when I'm searching. However, with this detector I could tell the difference between the ferrous and non-ferrous because of the "broken" nature of the signal when the target was iron. My final find of the search was a broken pastry jigger that came from under a large hawthorn tree.

"For the second trip out with the Scout I fitted the 8in concentric coil. Although the difference in the weight was noticeable, it was an advantage because it helped when I was pushing against some of the larger weeds. I soon had another crotal bell and a cow horn protector, which really gave a crashing signal through my headphones. I also picked another harness mount, but this time without the leather attached. My best find was a very badly damaged silver thimble from a depth of about 6in.

"Considering that this field has been continuously searched for about ten years, it was surprising that such large items were still being found. Dur-

ing the time I used the Scout I didn't feel it necessary to alter the settings from those that I had originally started off with. I wasn't picking up iron but I was still getting the good targets. I felt confident that if there was a target in the ground it would locate it. When I did turn the sensitivity up into the red section, I didn't experience any undue chatter but I also didn't notice any marked increase in depth (probably because there was nothing there to be found anyway).

"If I have any misgivings about the Scout they would concern design rather than performance. The placement of the jackplug socket underneath the control box is not ideal. It means either fitting a right-angled jackplug or an extension lead to stop the strain on the headphone lead. All in all I felt comfortable with the Scout. I preferred the larger coil simply because of its extra weight, but in performance I couldn't tell the difference between the two. However, with longer user experience I suspect the wide scan would perform

better in bad ground conditions. It's a basic detector but with a "grown-up" feel to it."

**Conclusion**

Competition is fierce in the detector market no matter what level you are thinking of starting at, and price is an all-important factor in making a purchasing decision. The Scout falls at the top end of the introductory level price range and at £299 is not cheap. What it does have in its favour to justify that price is Laser's reputation for build quality, performance, and ease of use.

Jamie was particularly impressed that the 7in widescan coil, gave as good a result as the 8in concentric.

My conclusion on the Compadre was that it was a brilliant little detector. For a compact, one control machine to give such confidence in use is outstanding, and it will certainly not disappoint the user. Improvements in design have led to better handling than its predecessor, and at £229 it sets a very high standard. **TH**