# Field Test Report
# Garrett Ace 300i

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Fig.1. The new PROformance coil.



Fig.2. Control box cover.

Fig.3. Close-up of the armrest.


Fig.4. Close-up of the screen.


The Garrett Ace 250 is arguably the best selling entry level detector in the world and many detectorists have made great finds with this great detector with its distinctive yellow livery. Such is its popularity the second-hand values of it remain very buoyant. I have used three Garrett machines in the past so was intrigued when I was asked to review the new Garrett Ace 300i, the successor to the now iconic Ace 250.

The Garrett Ace 300i is the international version of the new Garrett Ace 300. Reading the Garrett website, there are several slight differences on the international version aiming to make it more suitable to UK and European conditions. The first is that the descriptions do not include US coins that some people found slightly confusing on the Ace 250. As iron is such a big problem in the UK and Europe, Garrett have increased the number of segments of iron in the discrimination scale to allow for fine tuning of the level of iron rejection to avoid losing good finds.

The Ace 300i is a three tone machine, with a grunt sound for iron, a medium tone for medium conductivity targets, and the iconic Garrett bell tone for high conductivity targets. The split at where the tones change is slightly different on the Ace 300i to suit European conditions.

## What's New?

The Ace 300i features a new larger 7 x 10 inch concentric PROformance search coil (Fig.1) that they claim gives greater coverage and increased detection depth. The Ace 300i sports a higher frequency of 8kHz versus 6.5kHz on the previous Ace 250, which should give better sensitivity to low and medium-conductivity targets. Other new features include Digital Target ID, giving a VDI number for each target rather than just a lit segment on the display; Frequency Adjust to help eliminate EMI or chatter caused by detectors running at the same frequency; more Iron Discrimination segments than the Ace 250 allowing for more precise iron ID; and stem locks for added stability.

## In the Box

I love opening new detectors but the courier arrived just as I left for work, so I had to endure the torture of seeing the package but not having time to open it. I rushed home and eagerly opened the box and was pleasantly surprised to see that the detector came with the three essential accessories every detectorist needs as standard: headphones, coil cover and control box cover (Fig.2).

There is a comprehensive user guide in the form of a pocket-sized book, which can easily be slipped into your pocket for reference in the field.

Assembly was very simple and within five minutes the detector was all set up and ready to use. Another very nice touch was that the detector came with a set of Duracell batteries already installed. Feel and balance of a detector is subjective, but I found the 300i comfortable to hold and well balanced. There is foam padding and a strap on the arm rest and this felt comfortable on my arm; and there is also some adjustment possible with the arm strap (Fig.3). There are 10 levels of adjustment in the stem allowing you to get the perfect adjustment for comfort and the new cam locks mean there is no wobble.

When switching on, you are presented with a nice clear easy-to-read screen (Fig.4) with all the information that you require. On the left, the detecting mode is highlighted. Across the top is

a target ID range suggesting the type of target, and under which are 12 discrimination segments. Below this is where the target ID number is display. At the bottom of the screen are the battery indicator and sensitivity level bar chart. To the right of the screen is a depth indicator, which gives an approximate depth for coin-sized targets.

As usual I tried a series of air tests to get acquainted with the target responses and get a feel for the general performance. While depth in air tests may not be reflected in the ground, I still always like to do them. The Ace 300i gave a good repeatable signal at just over 11 inches with my trusty Victorian test penny.

To get you started quickly Garrett included four pre-set programmes and a custom programme that you can tailor to your own needs. These are Zero Discrimination, Jewelry, (not a spelling mistake, it is US English), Relics and Coins. Any of these can modified to suit your own needs. Changes to any programmes are saved to memory and are retained when the power is turned off. When you switch the machine back on the last mode used is running.

Eager to try it out I headed off to a pasture field opposite a 13th century church. This field is full of iron and I have searched it many times. It is one of those fields that in theory should produce good finds but so far has failed to deliver. I initially started searching in Relic mode and was not troubled by any iron. Finds were scarce, and the silence was deafening. I then tried the Zero Discrimination mode. In this mode you hear every target, but iron gives a distinctive grunt. Hearing the iron gives you a lot of feedback about busy areas in the field where in theory good finds should also be found. In one area of the field there was an old barn and there are many tiny pieces of rust in the soil that gave a response. I found by knocking out the first discrimination segment was a good compromise and made the search more comfortable on the ears. Other than

Fig.5. Barrel tap found opposite a 13th century church.

Fig.6. Garrett Ace 300i on the beach.

Fig.7. Beach scrap finds showing the very small pieces of aluminium.

Fig.9. 'Turner Yeoman and Yates' back-saw logo.

Fig.8. First beach coin – a 2p.

several pieces of non-ferrous junk, my only good find of the evening was a very nice barrel tap (Fig.5). It always amazes me that large finds can still be found in fields that have been heavily searched. A video of this search is on my YouTube channel Kernow Beeper.

## Off to the Beach!

My second outing with the Garrett was to the beach (Fig.6). There had been a lot of sand dumped onto the beach in the storms and the beach is next to a holiday park, so is heavily searched in the summer and winter. I tried the machine on the dry sand and found a huge quantity of pull tabs and small aluminium pieces. I ran it in Jewelry mode at a sensitivity of 7 bars out of 8 and it was very stable. In the literature it lists it suitable for dry sand only, but I thought I would try the wet sand.

I was surprised at how stable the detector ran and how sensitive it was, and found several very small pieces of aluminium. When I buried a £1 coin at a depth of 6.5 inches, the Ace 300i gave a good positive response and even when the coil was raised a couple of inches above the sand the signal was still very good. I consider 8.5 is a very respectable performance. As I moved closer to the sea the sand became more and more saturated, and when false signals increased the sensitivity had to be reduced. When the very wet sand near the low tide line was reached the false signals reached a level that made it very difficult to detect, but Garrett do not claim this is a wet sand beach machine. I had an impressive range of scrap finds from the wet sand (Fig.7) some very small.

I moved back up the beach to the dry sand and managed to find my first coin, a 2p (Fig.8). I then headed up towards the play area and managed to find a further £2.13 in decimal coins, mostly recent losses. I wouldn't use the Ace 300i as a wet sand beach machine, but for dry sand and the occasional trip to a wet sand beach then it performs very well. A video of this search is on my YouTube channel Kernow Beeper.

## Pastures New

My next trip out came as a pleasant surprise. I was intending to search one field but met the farmer and had a chat. He asked me if I had tried the next field over and I said I didn't know it was his land, "Yes boy, tis my land, and that 'un over there." So I had two new fields to search. The grass was quite long in some places but still searchable. I hunted in the zero discrimination mode, as this was a new field and I wanted to see how much ferrous junk was in the field. My first find was a bit of a mystery; it was coin like with the words 'Turner Yeoman and Yates' (Fig.9). It was found about 3-4 inches deep. I initially thought it was a token, but thanks to the power of Google I discovered that the company was a back-saw manufacturer in the early 20th century, and I assume this is some sort of logo from a saw.

My next find was a very nice surprise, a crotal bell – albeit broken (Fig.10). This is the first one I have found since moving to Cornwall 11 years ago.

It was another 15 minutes before my next find was made. I removed my usual sized plug of soil and the find was still in the hole; I dug some more and still the same. I began to think maybe it was a plough share but was pleased to find a large buckle at 8 inches deep. Two paces on and a nice signal resulted in one of those rings that crop up all over fields. My next find was a musket ball at 4 inches deep (Fig.11) followed by another some 5 minutes later. Continuing my run of lead finds my next find was a bag seal.

My run of finds then dried up, and I had to wait another half an hour before out of the all iron grunts came the now familiar bell tone, and a signal reading in the high 80s. This resulted in another buckle at approximately 6 inches. As I approached the hedgerow I got a double beep signal in one sweep. I dug down, and at 3 inches found an oval weight with a hole through the middle. Checking the other signal I dug and found the twin of the first weight. I believe these

Fig.10. Various finds from my new field.

Fig.11. Lead finds from my new field.

Fig.12. Three halfcrowns from the fete site.


Fig.13. 1837 Netherlands 10 cents and 1919 threepence.


Fig.14. Cigar tin with the pre-decimal penny found inside.

Fig.15. Half of the coins found – pennies, halfpennies, threepences, and farthings.

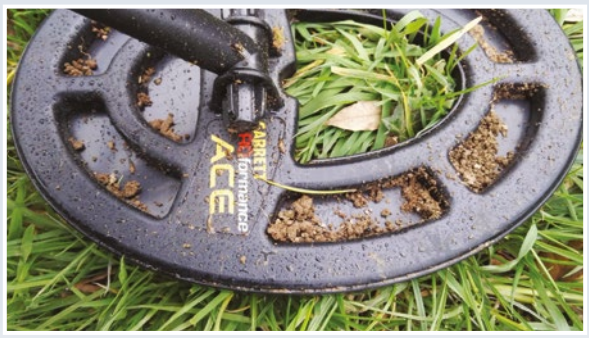


Fig.16. Coil cover full of soil.

are net weights used by rabbit hunters when out ferreting. This would also tally with the hedgerow location.

Moving back into the field I received the distinctive bell tone at the end of a sweep and almost missed it. Somehow I managed to flick the find with my first spadeful of soil so temporarily lost it. I then spotted the small weight just over 12 inches from the hole. This again is a first of a kind find for me. It was then back to the lead again with a very small bag seal from 3 inches. Then on the way back to the car came another musket ball.

I was very pleased with the way the Ace 300i performed on the new field. I did not dig one piece of iron other than one iffy signal with a very jumpy target ID number and iron grunt with good signal (which I dug just to check my suspicions). It was a nice set of varied finds from reasonable depths – what more could anyone want?

## Time Travel!

My next outing with the Ace 300i was not planned. I had arranged to go to Somerset to see my mother. A chance conversation with a family member, who works in construction, gave me access to a private site. I have been sworn to secrecy regarding the location; all I am allowed to say is that it was a site in a private garden that was used for fetes and events. The site was being cleared for construction, and I had a three hour opportunity to search it.

Anyone like me, who started detecting in the 1970s, will remember the seemingly bountiful supply of coins that seemed to be in the soil; there were coins everywhere. Well, this is what this site was like.

Switching on in Relic mode, within 5 minutes I had found three pre decimal pennies, and they just kept coming and coming, all from 3-7 inches deep, and all good strong signals as you would expect.

The Ace 300i was in its element, doing what Garrett had designed it to do in the US, find coins; and find them it did!

There were four outstanding finds. The first was a large signal in the high 90s. I really thought it was going to be an aluminium can, but 5 inches down were three halfcrowns! (Fig.12). None were silver, very much to my annoyance. In nearly 40 years of detecting I have found many halfcrowns, but a silver one has so far eluded me.

The second coin was a silver 1837 10 cents from the Netherlands, again a first for me; and the third was a 1919 silver threepence (Fig.13). My real fun find was a large high 90s signal, and thoughts of an old purse full of silver halfcrowns raced through my head. I dug down 2-3 inches and found a Henri Wintermans cigar tin (Fig.14). As I pulled the tin out, it rattled. Quickly opening it I found that inside was an Elizabeth II pre-decimal penny, in surprisingly good condition! It was probably some poor lad's money to spend at the fete.

The three hours quickly came to an end and I had to head back to Cornwall. In those hours I managed to find 76 coins, including pennies, halfpennies, threepences, and farthings (Fig.15). I gave half of the coins to the landowner as he was keen to show them to his grandchildren. Alas, this productive site will soon be a housing estate, but it goes to show you should not forget to search your own garden!

My time with the Garrett Ace 300i is now about to draw to a close. I will miss this detector and have grown to like this yellow coin magnet. I think it is an excellent starter detector that has a very shallow learning curve that is easy to use. New users can just turn it on and go, and it has enough performance and features to grow with the user. There are a range of different coils that can be added to give flexibility in the future. My only slight niggle is the design of the coil cover which is solid, and soil/sand fills up these gaps (Fig.16). I think this detector will be a winner. TH