

"De Zanding": 12.000 till 4.000 year ago

The area "De Zanding" near Carnegie Cottage (formerly "de Wever") bordered by respectively Boveneindseweg (along the fence of de Hoge Veluwe), Karweg and Heiderand is an area that I have known my whole life as a landscape with heather, windblown pine and little patches of moving sand dunes. Over 60 years I search there now and again for artefacts from the stone age, roughly 12.000 till 4.000 years ago.

In the meantime my wife and I have found there dozens of artefacts (man-made tools or waste material).

When you look at the map you can see that only about 5% of this area is barren. Of this barren sandy area about half are patches from which sand is blown away and where small stones and gravel remains and also artefacts if they were present in the original topsoil. The other half are patches where sand is blown to. There you will never find prehistoric artefacts on the surface.



Figure 1 The area "De Zanding"

Simple math shows that the number of artefacts present in the whole area could be 40 times larger than the number of artefacts found by us.

Intermezzo 1: The search.

We often try to walk "towards the sun" through the patches where sand has been blown away. By doing so sometimes you see shimmering elements between the gravel a few meter before your feet. Sometimes it are pieces of glass, whet leaves etc., often enough it are pieces of flint. If you want to find artefacts you have to stoop often and take a close-up look at the shimmering elements. Most pieces of flint however aren't artefacts but naturally fractured pieces of flint. The flint nodules are broken in the moraines of the ice ages or in the wild runs-offs of the melting ice after those ice ages. Flint occurs here in many colors: from honey color through grey and white to almost as translucent as glass.

A flint axe or a Neolithic arrowhead will be recognized by most people. They are very rare however here. We have in all these years in this area only found two, the Neolithic arrowheads pictured below.



Figure 2 Neolithic arrowheads

Most common artifacts are flakes. Flakes are generally thin flat pieces of flint that are either a semi-finished product or waste produced while making a tool. A trained eye can see the location where the maker hit the original block of flint when he detached the flake, the bulb of percussion. (The yellow arrow in fig. 3 left). A second hallmark are the ripples, concentric waves radiating from the point of percussion (see the clear waves just inside the yellow arc). The

stone from which the flakes were detached is called a core. (Fig 3 middle left) A good flintknapper can produce long small flakes that are named blades. (Fig 3 middle right) Blades are processed into arrowheads, (razor-sharp) knives, scrapers and drills (to process hides, bone antler and wood) and everything else they needed.



Flake with percussion bulb and -ripples

Core
(Broken) Blade

Nodules and "Pot lids"

With some training you can distinguish flakes, cores and blades. A mistake often made is to identify so called "pot lids" as artefacts. These pot lids are created by natural processes as woodfires, severe frosts etc. Such a "pot lid" (Fig 3 right) does not have a percussion bulb.

These artefacts have hardly any intrinsic value or none at all. For science it is important however to document the location where the artefact was found as precise as possible. For us the smartphone comes in handy. Whenever we find an artefact, we take a picture with someone standing on the exact location and showing as many terrain features as possible. (Fig 4) We also make a close-up of the artefact (Fig. 5). Finally we mark and label the location on Google Maps. (Fig 6) By doing so finds that are made with a large time interval can be related to each other.



Figure 4 Marking the spot



Figure 5 Documenting the find

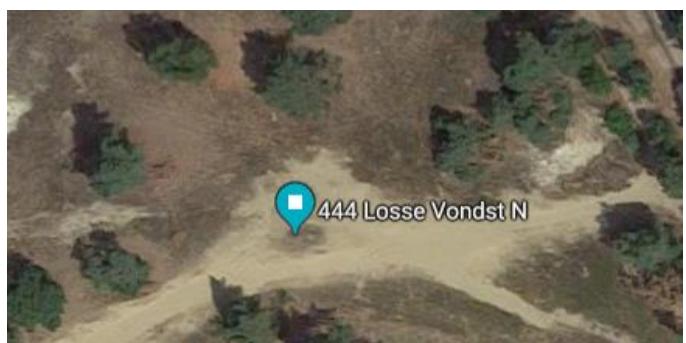


Figure 6 Marking location in Google Maps

The finds

In the whole area we have found approx.. 25 scrapers, most in one location only a few meters square. Further 4 Mesolithic points two Neolithic points and possibly a (part of) Paleolithic point. As far as waste products are concerned: two cores, 2 small blades en a few dozen flakes.



Figure 7 Some button scrapers



Figure 8 One Paleolithic, 4 Mesolithic en 2 Neolithic points

Intermezzo 2: Characteristics of the stoneage.

The area "de Zanding" is formed in the period from just after the one but last ice age till the end of the last ice age, roughly from 225.000 till 12.000 years ago. The area got its present form approx. 12.000 years ago. That is just before the final part of the Paleolithic, *the Young-paleolithic*. This was the time of the reindeer hunters. These people followed the reindeer herds and killed reindeer with bow and arrow and spear. NW-Europe was more or less a tundra area at that time and the reindeer hunters moved over large distances every year. (Fig. 9)

Because of the wide open landscape and the long voyages these people could acquire premium flint. We can see that in beautiful long blades and arrowheads. One of the edges was often worked on, retouched we call that, like the Tjonger-point found in northern Limburg (Fig. 12).

In the *Mesolithic* The Netherlands was densely overgrown and swampy in many areas. The people settled on favorable places to provide in their subsistence by hunting, fishing and gathering. These places are often located at or near water, streams or lakes. Possibly our inhabitants also used seasonal encampments. (Fig. 10)

Because of the dense vegetation flint for tools was not easy to obtain. Often small local flint nodules made do. Partly because of this the Mesolithic is characterized by small artefacts. (Fig. 13)

In the *Neolithic* agriculture and animal husbandry started. At suitable places people settled permanently. Part of the surrounding area was deforested and people started to grow food instead of gathering it in nature. (Fig. 11) The diet was supplemented in that time by hunting game present in the area.

In the area of flintknapping we see a new technique: the flat surfaces of the tools were worked with so called surface retouch. (Fig. 14) This is an important technological step ahead. Flakes and blades are always a little hollow at the bottom, the lengthwise cross-section is curved. By removing material at the bottom at both ends perfect flat tools could be made. Thus improving the aerodynamic properties of the points.

In the Neolithic flint was traded over vast distances. In Rijckholt-St Geertruid in Southern-Limburg many flint-mines were found. We also find flint artefacts in Holland that were made in France and Denmark



Figure 9 Paleolithic reindeer hunters



Figure 10 Mesolithic seasonal camp

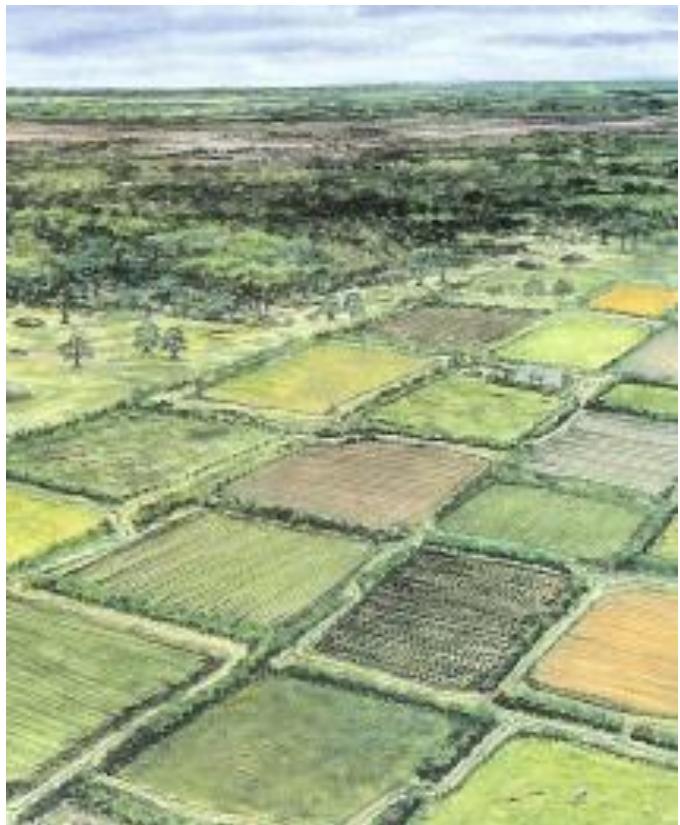


Figure 11 Neolithic settlement



Figure 12 Tjonger-point,
The left side is retouched



Figure 13 Models of Mesolithic
arrows



Figure 14 Neolithic arrowheads
with surface retouch

Interpretation of the finds

Most finds are isolated objects. On just one spot we have (so far) found a concentration of artefacts, predominantly small button-shaped scrapers.

Looking at the characteristics of the individual artefacts a Mesolithic context is most likely. Looking at the composition of the total “toolkit” the finds are most likely the result of an activity during a hunting or gathering trip. The butchering of captured animals en more in particular the cleaning of hides come to mind.



Figure 15 Button-scrapers



Figuur 16
Transversaal spits

The Mesolithic points are all isolated finds, mostly transversal points. (These points were inserted as barbs in the shafts and fixed with tree raisin and sinew, fig. 16) One can imagine that looking in the dense vegetation for a an arrow that missed the target is somewhat like looking for the proverbial “needle in het haystack”. Pursuing the animal in order to get of a second shot seems to be a better use of your time.



Figure 17 Mesolithic points

The first Neolithic arrowhead (Fig. 18 left) is found in an area where also some flakes were recovered. The arrowhead is damaged. The tip and one of the barbs are broken off. One could imagine a hunter pausing to rearm a damaged arrow. The possibility it is just as likely that an injured game animal hide out here to die. Who knows? All arrows, bone, antler etc. are long gone.

Recently we found a second Neolithic arrowhead, with 3 barbs (Fig. 18 right)



Figure 18 Neolithic arrowheads

The possible young-Paleolithic arrowhead is a real tidal case. It would be very nice if 10.000 years ago a reindeer hunter roamed the area "De Zanding" and left an artefact there. (Fig 19)



Figuur 19 (Deel van een) Tjonger-spits

Besides the artefacts found, the artefacts that were not found are equally important. Bronze and iron tools are very rare and iron in particular falls apart quickly in this sandy soil. Thus them not being found here is to be expected. From the bronze age onward people start to make clay pots. Until now we have hardly found any sherds. Only some stoneware sherds. These date from the 14th century or later. (Fig 20)



Figure 20 Stoneware sherd

It seems that from the bronze age onwards this area was not visit frequently, at least not with activities resulting in the interment of artefacts from the bronze age, iron age or early middle ages.

To conclude

When you wander through this area and it is a little foggy, you might imagine that a young paleolithic hunter walks around. Searching for a reindeer that stayed behind in this wide open and frozen plain.

Or maybe in the twilight you think some light from a campfire shines through the all present dense vegetation. A place where some Mesolithic people are processing their booty.

It is not imaginary at all that you see a deer passing. If you are very quiet you might think you hear an arrow whooshing by launched by a Neolithic hunter trying to vary his daily diet.

We hope you got an idea with this article about what happened in this beautiful piece of nature in the last 10.000 years. Or put better ***could have happened.***

Did you find flint artefacts yourself and you want to know more about them? Please contact us

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Thanks to Archeoweb (www.archeoweb.nl) for the use of the stone age impressions Mesolithic and Neolithic and the reconstruction of the Mesolithic arrow armaments. And thanks to Jac. Visser who made the impression of the reindeer hunters.



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