



## Landscape settings as part of earth wall systems for defence

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Remnants of earth wall systems from different periods are preserved in many European countries. They were built for different functions, such as defence, demarcating ownership or keeping wild animals or cattle in or out a terrain, and often changed function over time.

Earth walls date from a past in which man had limited access to man- and horsepower. In the case of defence systems, our ancestors made use of the landscape settings to improve the strength. The poster gives an overview of landscape settings used for this purpose, from prehistoric up to medieval age, for building round and linear earth wall defence systems.

Round earth walls systems are found on:

- High viewpoints along a river, often in combination with marshland at its feet,
- Almost completely cut-off meanders of antecedent rivers. This natural setting offered an ideal defence. It allowed an almost 360 degree view and exposed the enemy for a long time when passing the river, while the steep slopes and narrow entrance made the hill fort difficult to access,
- Islands in lakes,
- Bordering a lake at one side,
- Confluences of rivers,
- Hills near the sea and a natural harbour with possibilities for defence,
- High flat hill tops of medium size with steep sides.

Of each situation examples are presented.

### Linear earth wall defence systems

For linear defence earth walls no overview of landscape settings can be given, for lack of sufficient data. The Celtic, 10 m steep Beech Bottom Dyke earth wall system from around 20 A.D. connects two steeply incised river valleys. For building the Hadrian Wall (UK) the Romans made use of earth walls paralleling the steepest cuesta of the Cheviot hills. The Viking Danewerk (Ger), was built on push moraines and used the coastal marsh lands at their feet for defence. And the defence of the earth wall around the Velder (NL, probably 13th century) made use of the many small streams crossing this marshy coversand landscape, by diverting them into a canal perpendicular to the earth wall.

### Recommendations

- The conservation and management of earth walls should not only be directed at the earth walls but should include the historical landscape settings that were part of the defence system.
- From this perspective the Dutch earth walls that make use of the landscapes of the Saalien ice age and Weichselien coversand present unique situations in Europe.

### Reference

Hanneke van den Ancker, Pim Jungerius, Michel Riksen. Aarden wallen – bijdrage vanuit de aardwetenschappen. In: Henk Baas et al (eds). Tot hier toe en niet verder – historische wallen in het Nederlandse landschap. RCE - Cultural Heritage Agency of the Netherlands, Amersfoort (with English summaries)

Link to pdf book: <http://www.cultureelerfgoed.nl/actueel/nieuws/publicatie-tot-hier-en-niet-verder-historische-wallen-in-nederlandse-landschap-versch>

