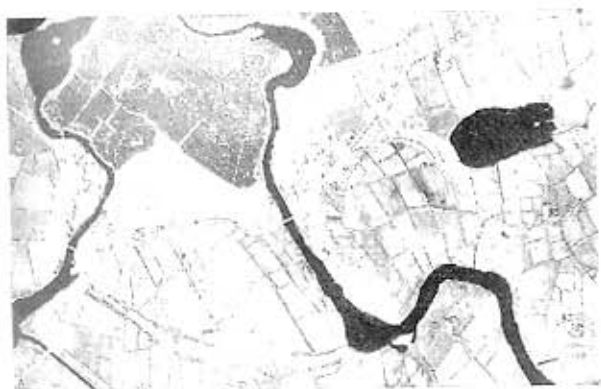


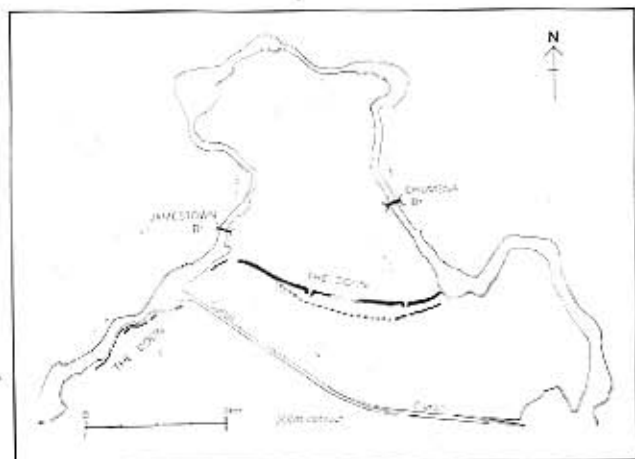
The Doon of Drumsna - a Celtic Iron Age Frontier

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The year 1996 saw the completion of two of the largest man-made construction projects ever carried out in the north-west of Ireland - the building of the Masonite factory at Drumsna and the construction of the Jamestown-Drumsna bypass. Interestingly not a stone's throw away are the remains of one of the largest man-made features in Ireland - the Doon of Drumsna, built 2000 years ago without the aid of machines or the need for planning permission.



• The Charlestown peninsula and the Doon from the air



• Plan of the Doon of Drumsna

The Doon of Drumsna, classified as a linear earthwork in archaeological terms, is one of the most intriguing monuments on Ireland's archaeological landscape. The site was first described in modern times by William de Vismes Kane in 1915 in a paper published by the Royal Irish Academy. Kane proposed that the earthwork was a boundary between Connacht and Ulster. Since Kane's paper archaeologists have for the most part interpreted the Doon of Drumsna as a promontory fort fortifying the Charlestown peninsula against attack from the Roscommon direction in the south.

The 'Doon' as it is named on the Ordnance Survey maps is located in the north-east of the County Roscommon close to the River Shannon where the river forms the boundary with County Leitrim. At this location the Shannon forms a great loop formed by the water encountering limestone rock which diverts the river northwards then eastwards and finally southwards towards Rosky.

The large promontory formed by the river is referred to as the Charlestown peninsula and measures 750m across at its narrowest point. Two villages, Drumsna on the east and Jamestown on the west, have developed around bridges which cross the Shannon. The strategic importance of the river crossings at this point in the Williamite period is evidenced by the fortified nature of Jamestown and the presence of the star-shaped artillery fort which overlooks the town.

Description of the defences

The Doon of Drumsna itself is composed of a series of defensive earthworks surviving on the Roscommon side of the river, but designed to defend the unusual topographical formation which is

the boundary with County Leitrim. The principal earthworks form ramparts which cut across the neck of land to the south of the bridges at Drumsna and Jamestown with ancillary earthworks flanking the riverbank on the south-western part of the loop of the Shannon.

The main portion of the defence is formed by a large earthen rampart of staggering proportions. Where it survives best the rampart in profile stands up to 6m high on its northern side where there is a steep face and up to 30m wide at the base where it slopes gently back to the south. The defensive aspect of the rampart on the northern side is further enhanced by a smaller arrangement of double banks located around 4m in front of the main rampart running along its 1.6km length. South of the main rampart at an average distance of 40m is another pair of banks with intervening ditch traceable for most of the length of the earthwork.

higher drier land surrounding the boggy land would seem to have formed the roads to the entrance gaps in the main rampart, accounting for the irregular spacing of the locations of the entrances.

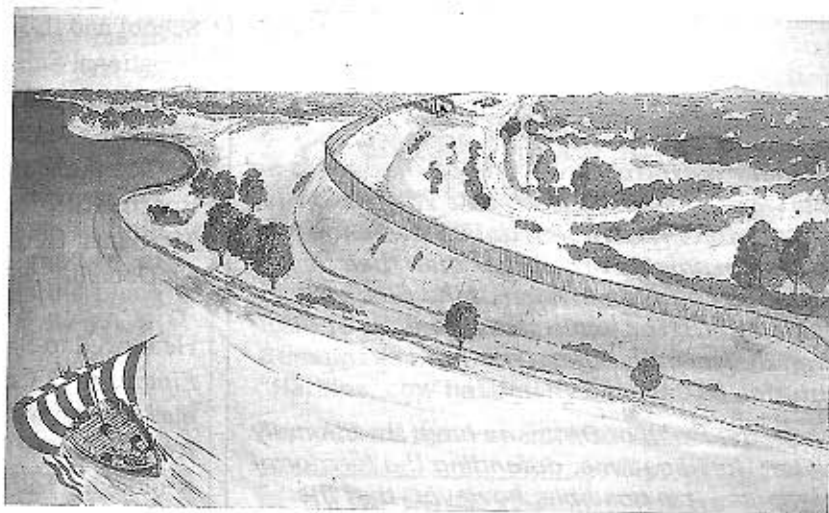
Furthermore, in his 1915 paper, Kane makes an intriguing reference to the discovery of iron-shod wooden piles on the eastern extremity of the site. It is interesting to speculate that these may have been a wooden form of chevaux de frise erected to protect the eastern flank of the defences which could have been breached by a boat crossing from the Leitrim side of the river.

Thus it would appear that far from being a defensive earthwork enclosing and defending the Charlestown peninsula that the elaborate earthworks were erected to do quite the opposite. Their defensive aspect is against the north and in particular defending the multiple fording points and shallows around the loop of the Shannon between Jamestown and Drumsna.

The resistivity survey

Archaeological research is now armed with many forms of non-destructive techniques of investigation. Such methods include ground-probing radar, magnetometry and resistivity referred to as remote-sensing techniques which can be used to identify and discover subsurface features without having to resort to excavation. In general, geophysical surveys are relatively cheap and can provide important archaeological information.

Resistivity survey works on the principle that an electrical current is passed through the ground through probes and the resistance to the current is measured by a meter. Rock and clay provide high resistance to the current, while buried features such as pits and



♦ Reconstruction of Doon of Drumsna c.2000BC by Paul Francis (courtesy of Waterways Visitor Centre, Ringsend)

postholes because of their moisture retentive fill provide low resistance. When carried out in a grid pattern such measurements can be depicted graphically to show any patterns in the subsurface resistance and indicate the presence of archaeological sites.

In association with Damian McGarry we carried out a resistivity survey at a portion of the area of the eastern entrance through the main rampart in the hope of identifying post holes or palisade trenches associated with the defences and gateways which presumably existed at the entrance gap. The results of the survey were subsequently processed by John Haigh of the Department of Archaeological Science at the University of Bradford. The survey panel measured 29m by 13m and was located at approximately the mid point in the entrance. At approximately the mid point of the panel an area of low resistivity was identified which is interpreted as evidence for the presence of a large posthole which may have held a large central gatepost.

The evidence for a large central gatepost further emphasises the Iron Age affinities of the site and in plan is analogous with some of the excavated evidence from similar funnel-shaped entrances in Britain and on the Continent.

The date of the earthworks

In our original article in the *Emania* journal we suspected that the site was Early Iron Age in date, sometime between 500BC and AD400. Its large scale was considered to be typical of what we expect for the Iron Age and the fact that the site was not mentioned in any of the annals suggested that the site predated the Early Christian and medieval periods.

An opportunity to retrieve some scientifically dateable evidence arose when a local farmer re-cut an existing drain through the main

rampart. The drainage work took place c.100m west of the eastern entrance through the rampart at a location where the drainage ditch provided a profile through the rampart. The section face was cleaned back on the west side of the drain. The section showed clearly that the rampart rested directly on peat which had become

compacted under the sheer volume of soil which formed the rampart.

Samples of wood from the base of the bank and some peat from underneath the bank were taken for radiocarbon dating by Jan Lanting and Anna Brindley of the Biologisch Archaeologisch Instituut, Groningen, Holland. The date from the peat sample was firmly in the Neolithic period, c.3000BC, indicating that the surface of the peat bog had been considerably disturbed during the construction of the rampart. The sample of wood was more likely to



♦ View along the main rampart with people for scale

The entrance features

A rampart of this scale would, of course, provide an impassable obstacle were it not for the incorporation of two entrances through the earthwork. These two entrances, virtually identical in plan, are located at 280m and 970m from the eastern extremities of the rampart. There are also corresponding gaps through the smaller double banks on the north and south of the entrance gaps.

These entrances consist of banks running south at right angles to the main rampart and would have had gates at the front and at the rear. The type of entrance with its characteristic funnel-shaped plan is found in central Europe where they are known as 'Zangentor' or 'pincer' entrances. The defensive concept behind the design of such entrances is that enemy forces would be permitted to pour through the forward gate and would then be trapped by the second gate. A retreat from such a position would be incredibly difficult. The defenders positioned above them behind defensive palisades would then be able to pick the intruders off at will with spears, arrows or slingshot.



♦ Reconstruction drawing of the entrances from the north by Paul Francis (courtesy of Waterways Visitor Centre, Ringsend)

River-edge earthworks

To the west of the main fortifications there are other banks and ditches which run parallel with the river bank. The surviving remains run for a distance in excess of 1km, although their original distance may have been much greater. At a distance of 3.5km upriver from the main fortification the Ordnance Survey maps depict yet another 200m section of earthwork, this time an isolated stretch, running parallel to the river's edge in the Townland of Corry.

The Corry section of the earthworks provides an important clue to the interpretation of the function of the complex of earthworks. The Commissioners' Report for the Improvement of the Shannon published in 1839 shows that the river is shallow at this point and fordable especially in the Summer when the river level is at its lowest. Indeed Kane pointed out the river edge earthworks are 'proportionally of larger size opposite any shallow reaches of the river'. Again the Shannon navigation maps demonstrate this very clearly and further indicate the existence of multiple shallows and fording points north of the main fortifications from Jamestown Bridge to Drumsna bridge. It is, therefore, not surprising that the elaborate fortification was erected at this location on the Shannon given the significance of fords for communication and transport, in frontiers and in warfare.

The natural defences

The natural topography also enhanced the defensive qualities of the Doon of Drumsna. On the northern side of the main rampart is an impassable stretch of bog up to 100m wide. At first our interpretation was that this bog may have formed as a result of the removal of soil to construct the ramparts and fortification. However, as we shall describe later, it is now clear that the earthwork is built directly on top of the area of bog which existed before the commencement of the construction of the banks. The

indicate an accurate estimate for the construction of the rampart and the radiocarbon determination indicates that the rampart was constructed sometime between 338 BC and 44BC placing the earthwork firmly in the Iron Age as suspected.

Conclusions

Recent excavations in advance of the construction of the Jamestown-Drumsna bypass revealed a wealth of information about life in this part of Leitrim from the Mesolithic period (c. 7000BC) through to the settlements and cooking sites on the Shannon's edge in the Middle - Late Bronze Age c. 1200BC. Our work on the Doon of Drumsna has revealed that it formed a formidable frontier in the last few centuries before the birth of Christ. The Doon would have functioned much in the same way as the Iron Curtain which divided Europe until quite recently with its entrances controlling the flow of human and other traffic as once did 'Checkpoint Charlie' in the city of Berlin. This symbol of centralised authority from the Celtic 'dark age' sheds light on the heroic era which finds echoes in the text of the Táin which records ancient conflict between the forces of Connacht under Queen Maeve and the forces of the ancient kingdom of Ulster. Having stood for 2000 years or so as a sentinel at the frontiers of Connacht, the Doon of Drumsna now stands at the frontiers of our knowledge of prehistory in Ireland.

Linear earthworks in Ireland

Within the archaeological record there is a type of feature which has intrigued archaeologists and antiquarians for several hundred years; this is the class of monuments known as linear earthworks. The distinguishing characteristics of linear earthworks are their unusual length, their large size, and the presence of multiple banks and ditches - these features occurring either separately or in various combinations. Linear earthworks were once thought to be imitations of Roman fortifications such as Hadrian's Wall which dates to the 2nd century AD, but more recent dating evidence has shown that some of the Irish examples are earlier than their supposed models. Excavations by Aidan Walsh of the Black Pigs Dyke in County Monaghan and Chris Lynn's investigations at the Dorsey in County Armagh indicate that these northern examples date to the last few centuries BC.

Linear earthworks such as the Doon of Drumsna have traditionally been interpreted as military fortifications, defending the territorial boundaries of early kingdoms. It is possible, however, that the purpose of some linear earthworks was merely to divide property, or to make cattle-rustling more difficult.

Throughout the entire country, linear earthworks have attracted much folklore and mythological explanation. They are commonly referred to as 'the Black Pig's Dyke' or 'the Black Pig's Race'. Other names include 'the Worm Ditch', 'the Danes' Cast' and 'the Duncladh'. In the south of the country there are earthworks known as 'the Black Ditch' (An Cladh Dubh) in counties Cork and Waterford and 'the Red Ditch' (An Cladh Ruadh) in counties Kerry and Limerick. At the turn of the century T.J. Westropp, in his book entitled The Ancient Forts of Ireland records the popular belief that double-ditched linear earthworks in County Waterford and at Ardpatrick were made by the horns of St Patrick's cow.

The Black Pig legend is by far the most popular explanation. The gist of the story is that a cruel schoolmaster with magical powers was transformed into a large pig by one of his pupils and was pursued across the countryside, leaving in his wake large indentations in the ground - the earthwork - before drowning in a lake or river.

LEITRIM'S MAYOR OF SLIGO



Seamus and Annie in happy mood

Seamus Dolan is Mayor of Sligo this year. He was born in Newtownmanor at Moragh. He went to school in Gortnaskcagh National School and then attended the Vocational School, Manorhamilton. Seamus served his apprenticeship in Mitchell's Manorhamilton where he worked in the good company of Tom Roache RIP, Joe McKiernan, Peter McKenna, Geraldine Dolan and Mary McDonald.

He moved to Sligo to join the staff of Liptons in O'Connell Street. He made his home in Sligo and married Anne Murtagh from Laughta, Kinlough. They have two sons, Pdraig and Seamus.

Seamus now has his own business in John Street. He is Chairman of *The Leitrim People's Association in Sligo*. He has served as a steward at Knock Shrine for twenty-eight years. He is an ardent supporter of the Leitrim GAA team and he also attends a variety of other sporting events.

The *Leitrim Guardian* congratulates Seamus on the honour he has achieved in being **The First Citizen of Sligo** and on the manner in which he carries out the duties of the Office.