

# Ballyteige Burrow



Hybrid Marsh Orchid

## Ballyteige Burrow

— One of the jewels of the South Wexford Coast —

### Introduction

Ballyteige Burrow is a placename that is used in the following three different senses

- a townland adjoining the village of Kilmore Quay,
- the sand dunes that dominate that townland, and
- a large complex of protected natural heritage sites that comprise the townland and adjoining areas in the south Wexford coastal strip.

### The townland

Ballyteige Burrow it is a 9km-long, narrow, coastal townland that extends in a north-westerly direction from the seaside village of Kilmore Quay (Irish National Grid Reference: S9603)<sup>1 & 2</sup>. The townland has an area of 271ha (665 acres) and is dominated by a magnificent series of sand dunes. The placename 'Ballyteige' is interpreted<sup>3</sup> as an anglicization of the Irish 'Baile Thaidhg' (Tadhg's town). It is not known who Tadhg was. 'Burrow' refers to the fact that the townland was managed as a rabbit warren for over 600 years.

### Rabbits

The Rabbit is not native to Ireland. The animal was introduced by the Anglo-Normans in the 12th and 13th centuries and was farmed as a source of food and fur. Originally only the young were known as 'rabbits'; the adults were called 'conies'<sup>4</sup>.

### The Whitty family

Ballyteige Castle is located 1km north of the village of Kilmore Quay. The castle was the seat of the Anglo-Norman Whitty family and there are several historical references to various members of the family from as early as 1247. Sir Richard Whitty was summoned to parliament as a baron by Edward III (1312-1377). Members of the Whitty family managed the rabbit warren at Ballyteige Burrow. The family lost possession of their stronghold in 1654 when the estate was forfeited following the Cromwellian plantation<sup>5</sup>.



Ballyteige Castle

### Cromwellian Plantation

The Cromwellian conquest of Ireland was one of the largest land-grabs in modern European history. Irish Catholics were largely confined to a reservation in Connacht. Ballyteige Burrow was confiscated and was granted to new owners in payment for debts incurred earlier. The Civil Survey of 1654-56 was conducted to describe and value the lands being confiscated<sup>6</sup>. The Civil Survey describes Ballyteige Burrow as "*a sandy Burrow called the great Cunniger of Ballyteige*" fringing the tidal creek

Mablen Haven and the wetland Broad Water. Sir William Petty conducted the Down Survey and produced the first detailed map of the area; his map features the words "*Cunmy bourrogh ...*" written across Ballyteige Burrow<sup>7</sup>.

### Origin of the landform

Ballyteige Burrow is part of the local legacy of the last ice age. As both Irish Sea ice and ice sheets from the midlands melted and as the pent-up contents of ice-dammed lakes were released, water poured seawards via a large meltwater discharge channel that ran from Mayglass to Bridgetown.

Ballyteige Burrow sand dunes and the Burrow shore fringing the Celtic Sea.



Huge quantities of clay, silt, sand, gravel and stones were carried by the meltwater and were sorted and deposited both on land and in the nearshore waters. Sea level was lower during the last glaciation as large quantities of water were 'tied up' as ice. Sea level rose as the ice sheets melted. Rising sea level and coastal processes reworked the sediments and rolled a long lens of gravels and shingle onshore. This lens grew in size to become a fringing barrier anchored to Forlorn Point at its eastern end but free at its western extremity (see map overleaf). The shingle barrier was later decorated with dunes sourced from sand blown off the beach by the prevailing south-westerly winds<sup>8</sup>.

### Age of the dunes

Sand dunes in Ireland began forming about 6,000-3,000 years ago<sup>9</sup>. Deposits of carbon in a buried soil found under the dunes at Ballyteige Burrow have been dated to be about 2,000 years old [1955±60BP (UB-2758)]. That result implies that the gravel barrier and its sand dunes were transgressing landwards at that time<sup>9</sup>.

### The foundation of rock

Seven different rock units underlie Ballyteige Burrow but the rocks are not exposed anywhere except at the extreme eastern end of the dunes where the Kilmore Quay Group of gneisses of Precambrian Period age outcrop. These ancient rocks are more than 570 million years old. They underlie Kilmore Quay village and are exposed on the foreshore on both sides of the marina<sup>10</sup>.





## Intaken lands

A large area of hind-dune silting wetland (approximately 660ha) was reclaimed from the sea during the period 1847-1855 (see map below)<sup>11</sup>. The work involved the following four main elements:

1. **The Cull Bank** is a 401m-long earthen dam that was built across Ballyteige Lough at the landward terminus of the neap tide basin. The bank was constructed to prevent the incoming tide from flooding the hind-dune lowlands. The seaward side of the dam was faced with a high wall built of limestone rock quarried at Seafield, Duncormick. A reservoir was constructed behind the dam to hold drainage water.
2. **The Bridgetown Canal** carried the Bridgetown River between levees across the northern extremity of the intaken lowlands.
3. **New drains** comprised two extensive networks: the Cull Bank system and the Blackstone system. These drains collected surface water from the polders and discharged them to the estuary at The Cull by gravity fall when the tide had ebbed.
4. **New roads** were built linking the village of Kilmore Quay to Baldwinstown, Rathangan and Duncormick.

These drainage works created an extensive area of agri-polders and permanently joined a significant portion of Ballyteige Burrow to the mainland (see map below).

## Sunny South East

The extreme south-east corner of County Wexford, including Ballyteige Burrow, enjoys the highest number of hours of bright sunshine per year (>1,600 hours) of anywhere in Ireland<sup>12</sup>.

## Access points

Public access to Ballyteige Burrow is via a number of points adjoining the village of Kilmore Quay. The hind-dune grass path is part of Sli Charman, a long-distance coastal

walking route established by Wexford County Council. Visitors are asked to observe the Country Code; in a nutshell: leave nothing but footprints; take nothing but memories; kill nothing but time. Also, be aware that electric fences are normally live from September to March.

## Infrastructure

Palings, electric fences and water troughs for cattle are the main structures on Ballyteige Burrow together with a green caravan, the ruins of the late Mag Redmond's cow shed, the Burrow House ruin, and the Life Saving Apparatus Station. Three underground fibre optics cables linking Ireland and Britain make a landfall under the dunes.

## Habitats

Habitats are places where plants and animal live. The dominant habitat types in the sand



Sea Spurge *Euphorbia paralias*.

system comprise shifting dunes and fixed dunes. Shifting dunes are characterised by the presence of bare mobile sand and Sea Spurge *Euphorbia paralias*. Fixed dunes, on the other hand, have very little bare sand and support hundreds of species of wild flowers and grasses. Many of the fixed dunes exceed 10m in height, especially at the eastern end of the sand hill system. Slacks (hollows) are sometimes so deep that the underlying shingle barrier is exposed in them. And because of the shingle foundation all blowouts and slacks are dry-bottomed. The fixed dunes are also known as



‘grey dunes’ and are a priority habitat type for protection under the EU Habitats Directive<sup>13</sup>.

## Lower plants

The scarce Beard Moss or Strings-of-Sausages Lichen *Usnea articulata* occurs. The Scrambled-egg Lichen *Fulgensia fulgens*, a protected species, has been recorded nowhere else in Ireland outside of Ballyteige Burrow. Golden Screw-moss *Tortula ruraliformis* is very common on the dunes and changes colour from green to golden after moistening by a shower on a sunny day.

## Higher plants

The dunes are well developed, are of good quality and are consequently species-rich. The population of Wild Asparagus *Asparagus officinalis* subsp *prostratus* is especially extensive. The area abounds in wild orchids. The pink, clove-scented Pyramidal Orchid *Anacamptis pyramidalis* is pollinated by the Six-spot Burnet *Zygaena filipendula*, a black and red day-flying moth (see image on page 3). Thousands of Autumn Lady's-tresses *Spiranthes spiralis*, tiny white orchids, regularly bloom in August and September.

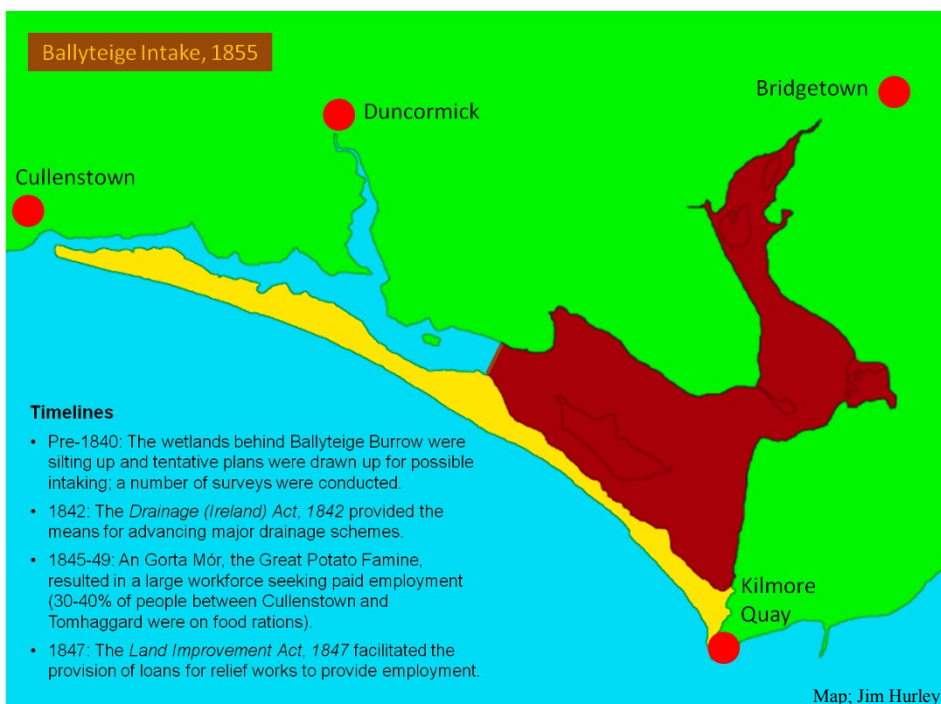
## Grasses

The dunes at Ballyteige Burrow are essentially grassy places and many species may be found. Marram *Ammophila arenaria*, known locally as ‘Bennet’, is the big, coarse grass that binds the mobile sand. Red Fescue *Festuca rubra* is the fine, soft grass that is abundant throughout.

## Invertebrates

Invertebrates are animals without a backbone; examples include snails, woodlice and insects. Sand dune snails are abundant at Ballyteige Burrow. *Armadillidium album* a rare, pale pill woodlouse has been recorded from a small number of sites on the east coast of Ireland. In 2006 it was found to be living on the beach at Ballyteige Burrow.

Two of the rarest bees found in Ireland have been recorded at Ballyteige Burrow: the Great Yellow Bumblebee *Bombus distinguendus* and the Shrill Carder Bee *Bombus sylvarum*. Both are classed as ‘endangered’ due to changes in agricultural practices. Both need flower-rich grasslands to ensure their continued survival. Other rare insects include the very brightly coloured jewel wasp *Hedychridium ardens* and the Silver Spiny Digger Wasp *Oxybelus*





*argentatus* that digs holes in which to store paralysed prey on which it lays its eggs.

Ballyteige Burrow is the stronghold in Ireland of the Turf Ant *Tetramorium caespitum*, a southern species. It nests under stones in eroded slacks and is the only species of ant in Ireland that gathers, stores, and eats seeds, so it needs wild flowers nearby as a food source. The dunes are a hotspot for butterflies and support a large population of the Dark Green Fritillary *Argynnis aglaja*.

On 30 April 2009 Tony Murray and Roy Anderson found a black ground beetle called *Calathus ambiguus* under driftwood on the fore dunes at Ballyteige Burrow. Their find proved to be a species new to Ireland.

## Wild birds

Walkers on the grass paths cannot fail to notice the resident Meadow Pipits, Skylarks, Wrens, and Stonechats. Flocks of Linnets visit from the adjoining polders, together with Reed Buntings. Migrant Wheatears occur in spring and autumn. Little Terns *Sterna albifrons*, Ireland's smallest and rarest breeding tern nest irregularly on the beach on the spit at the extreme western end of the sand system.

## Animals

The Common Lizard was very common on the dunes in the past but seems to have declined somewhat in abundance in recent years. The Rabbit population now see-saws between explosions and crashes due to the presence since 1956 of the viral disease myxomatosis. In the population's heyday trappers were harvesting up to 4,400 rabbits from the dunes each season<sup>14</sup>. Pygmy Shrews may sometimes be heard squeaking in the long grass. Hedgehogs and Irish Stoats are seen infrequently. Foxes, Irish Hares and other mammals visit from the adjoining polder lands.

The Pyramidal Orchid *Anacamptis pyramidalis* is pollinated by the Six-spot Burnet *Zygaena filipendula*, a day-flying moth. Here the moth is resting on a rayless form of Ragwort *Senecio jacobaea*.



## Land ownership

Henry Bruen, Oak Park House, Carlow, was the last landlord to manage the rabbit warren at Ballyteige Burrow. Kilmore Quay resident Mag Redmond acted as his local agent. Bruen died in 1954. The Burrow was sold in 1958 and the property passed to the present owners during the 1980s. The large western portion (228ha) is owned by the State and is managed as a Nature Reserve<sup>15</sup>. The smaller eastern portion (42ha) is very largely owned by a local limited company: the Kilmore Quay Community Development Association and is managed as a community amenity area.

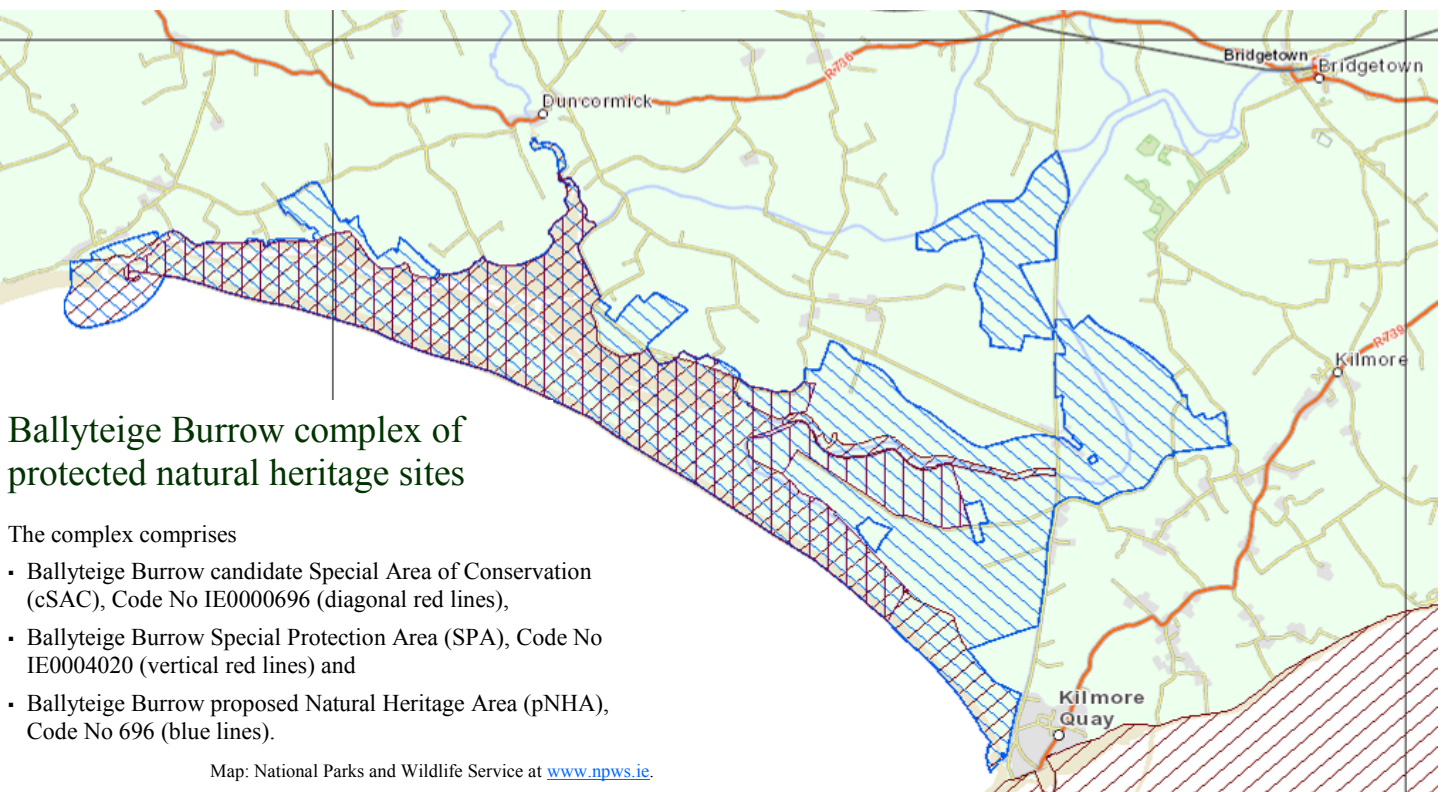
All of the townland of Ballyteige Burrow is rated of international importance for its natural heritage resource values and is subject to a number of nature conservation designations in an attempt to conserve its very many natural

heritage riches for the common good and for posterity.

## Nature conservation

The Ballyteige Burrow complex comprises Ballyteige Burrow and a number of adjoining areas subject to nature conservation designations (see map below).

The generic objectives of these designations are to maintain and/or restore the favourable conservation condition of the habitats and species for which the sites have been selected. A brief summary is provided overleaf; details with regard to the designations, the habitats and species that the areas support together with site descriptions, maps, conservation objectives, statutory instruments, etc., are all freely available online<sup>16</sup>.



## Ballyteige Burrow complex of protected natural heritage sites

The complex comprises

- Ballyteige Burrow candidate Special Area of Conservation (cSAC), Code No IE0000696 (diagonal red lines),
- Ballyteige Burrow Special Protection Area (SPA), Code No IE0004020 (vertical red lines) and
- Ballyteige Burrow proposed Natural Heritage Area (pNHA), Code No 696 (blue lines).

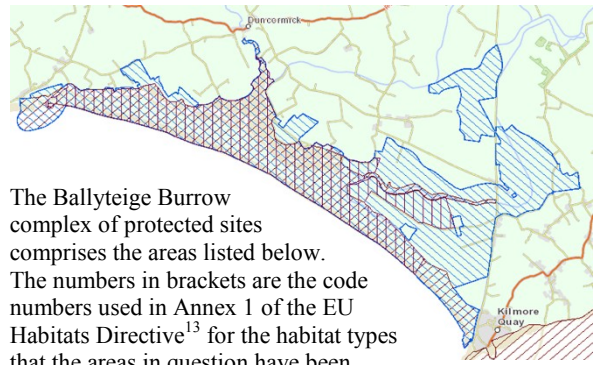
Map: National Parks and Wildlife Service at [www.npws.ie](http://www.npws.ie).

## Sources & references

1. Ordnance Survey of Ireland. Discovery Series. Sheet 77. South-east Wexford. Scale: 1:50,000.
2. Ordnance Survey of Ireland website at [maps.osi.ie/publicviewer/](http://maps.osi.ie/publicviewer/).
3. de Vail, S. S. 1994. *Origin and Meaning of Townland Names*. Pages 186-260 in Culleton, E. (Editor). 1994. *Treasures of the Landscape: County Wexford's Rural Heritage*. Wexford: Wexford Organisation for Rural Development (WORD).
4. Hayden, T. and Harrington, R. 2000. *Exploring Irish Mammals*. Dublin: Town House.
5. Adams, C. L. 1904. *Castles of Ireland, Some Fortress Histories and Legends*. London: Elliot Stock.
6. Colfer, B. 2008. *Wexford: A Town and its Landscape*. Cork: University Press.
7. Power, J. 1975. A Lake that stretched to Bridgetown. *Kilmore Parish Journal*, No. 4 (1975/76), pages 24-25. Kilmore: Tomhaggard-Mulrankin Muintir na Tire Council and the 1655 Down Survey maps, Manuscript No 725 in the National Library of Ireland.
8. Culleton, E. 1980. *The South Wexford Landscape*. Dublin: Mount Salus Press.
9. Carter, R. W. G. and Wilson, P. 1991. *Chronology and Geomorphology of the Irish Dunes*. Pages 18-41 in Quigley, M. B. (Editor). 1991. *A guide to the Sand Dunes of Ireland*. Compiled for the 3rd Congress of the European Union for Dune Conservation and Coastal Management in Galway. Dublin: Trinity College.
10. Tietzsch-Tyler, D., and Sleeman, A. G. 1994. *Geology of South Wexford*. Dublin: Geological Survey of Ireland.
11. Hurley, J. 2008. *Development Plan for the property at Ballyteige Burrow owned by the Kilmore Quay Community Development Association*. Kilmore: SWC Promotions.
12. Rohan, P. K. 1986 (Second Edition). *The Climate of Ireland*. Dublin: The Stationery Office.
13. EU Habitats Directive at [http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index\\_en.htm](http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm).
14. O'Keeffe, S. 2007. Trapping on the Burrow. *Kilmore Parish Journal* No 36, 2007/'08. Kilmore: Kilmore Parish Journal Committee.
15. DEHLG. 2004. *National Parks and Wildlife Conservation Plan for 2003-2008 Draft 2 Ballyteige Burrow cSAC, SPA & NR Site Code SAC 696 & SPA 4020 Co. Wexford*. Dublin: Department of the Environment, Heritage and Local Government.
16. Website of the National Parks and Wildlife Service at [www.npws.ie/](http://www.npws.ie/).
17. Crowe, O. 2005. *Ireland's Wetlands and their Waterbirds: Status and Distribution*. Newcastle: BirdWatch Ireland.

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## The Ballyteige Burrow complex



The Ballyteige Burrow complex of protected sites comprises the areas listed below.

The numbers in brackets are the code numbers used in Annex 1 of the EU Habitats Directive<sup>13</sup> for the habitat types that the areas in question have been designated. The fixed dunes (2130) and lagoons (1150) are rated priority habitat types<sup>13</sup>.

- ❖ The sand dunes at Ballyteige Burrow including embryo dunes (2110), shifting dunes (2120) and fixed dunes (2130). These impressive dunes support important plant communities and a number of Red Data Book species.
- ❖ Sand and shingle foreshores with their annual (1210) and perennial (1220) vegetation.
- ❖ The ebb delta at Cullenstown.
- ❖ The Cull estuary (1130) with its mudflats and sandflats (1140) that are exposed at low tide. In autumn and winter these species-rich flats support large numbers of feeding birds. The site is of international importance for Light-bellied Brent Geese and of national importance for Shelduck, Golden Plover, Grey Plover, Lapwing, Black-tailed Godwit and Bar-tailed Godwit<sup>17</sup>. The estuary also supports halophilous scrub vegetation one of the rarest habitat types found in Ireland. Perennial Glasswort *Sarcocornia perennis* characterises the scrub and is a plant that has been recorded from nowhere else in Ireland outside of the South Wexford Coast.
- ❖ The estuary (1130) of the Duncormick River.
- ❖ All salt marshes (1310, 1320 and 1330).
- ❖ Some fields adjoining the estuary that are used by Light-bellied Brent Geese and other wintering waterbirds to feed and to roost in.
- ❖ The Cull Pond and adjoining small fields.
- ❖ Hind-dune salt meadows (1410 and 1420).
- ❖ The Ballyteige Channels (1150). Artificial lagoon habitat supporting several lagoonal specialists.
- ❖ Polders in the Inish and Ballyteige Slob intake. These large, open, flat fields are used by wintering waterbirds such as Whooper Swans, Lapwing, Golden Plover and declining numbers of Bewick's Swan to feed and to roost in.

## Follow the Country Code when visiting Ballyteige Burrow

There are no restrictions on pedestrians accessing the dunes at Ballyteige Burrow from the village of Kilmore Quay. Ownership of the dunes near the village is vested in a local limited company: the Kilmore Quay Community Development Association Limited. Ownership of the more distant dunes is vested in the State. Visitors to both properties are welcome and can help conserve the biodiversity of the area by following the Country Code.

- Leave the area as you found it. Do nothing to destroy the wonderful amenity you have come to enjoy. Stay on the paths. Kill nothing but time; take nothing but memories.
- Please take your rubbish home with you. Leave nothing but footprints.

The protected wildlife areas are managed by the National Parks and Wildlife Service (NPWS). If you see any threats to wildlife report your concerns to Tony Murray, the local NPWS Conservation Ranger, e-mail [Tony.Murray@ahg.gov.ie](mailto:Tony.Murray@ahg.gov.ie), telephone (053) 914 7576. If you see any threats to the wellbeing of the property owned by the local community please report to the reception in the Stella Maris Centre in Kilmore Quay, e-mail [admins@eircom.net](mailto:admins@eircom.net), telephone (053) 912 9922.

Thank you.

