

# National Parks and Wildlife Service

## *Conservation Objectives Series*

### Towerhill House SAC 002179



An Roinn Cultúir,  
Oidhreacht agus Gaeltachta  
Department of Culture,  
Heritage and the Gaeltacht

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## Introduction

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

A site-specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

### Notes/Guidelines:

1. The targets given in these conservation objectives are based on best available information at the time of writing. As more information becomes available, targets for attributes may change. These will be updated periodically, as necessary.
2. An appropriate assessment based on these conservation objectives will remain valid even if the targets are subsequently updated, providing they were the most recent objectives available when the assessment was carried out. It is essential that the date and version are included when objectives are cited.
3. Assessments cannot consider an attribute in isolation from the others listed for that habitat or species, or for other habitats and species listed for that site. A plan or project with an apparently small impact on one attribute may have a significant impact on another.
4. Please note that the maps included in this document do not necessarily show the entire extent of the habitats and species for which the site is listed. This should be borne in mind when appropriate assessments are being carried out.
5. When using these objectives, it is essential that the relevant backing/supporting documents are consulted, particularly where instructed in the targets or notes for a particular attribute.

## Qualifying Interests

*\* indicates a priority habitat under the Habitats Directive*

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002179      Towerhill House SAC

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1303      Lesser Horseshoe Bat *Rhinolophus hipposideros*

## Supporting documents, relevant reports & publications

Supporting documents, NPWS reports and publications are available for download from: [www.npws.ie/Publications](http://www.npws.ie/Publications)

### NPWS Documents

<b>Year :</b>	2006
<b>Title :</b>	Bat mitigation guidelines for Ireland
<b>Author :</b>	Kelleher, C.; Marnell, F.
<b>Series :</b>	Irish Wildlife Manual No. 25
<hr/>	
<b>Year :</b>	2018
<b>Title :</b>	Conservation objectives supporting document – lesser horseshoe bat ( <i>Rhinolophus hipposideros</i> )
<b>Author :</b>	NPWS
<b>Series :</b>	Conservation objectives supporting document
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### Other References

<b>Year :</b>	2007
<b>Title :</b>	Protecting and managing underground sites for bats
<b>Author :</b>	Mitchell-Jones, A.J.; Bihari, Z.; Masing, M.; Rodrigues, L.
<b>Series :</b>	EUROBATS Publication Series No. 2
<hr/>	
<b>Year :</b>	2008
<b>Title :</b>	The lesser horseshoe bat conservation handbook
<b>Author :</b>	Schofield, H.W.
<b>Series :</b>	The Vincent Wildlife Trust
<hr/>	
<b>Year :</b>	2009
<b>Title :</b>	Importance of night roosts for bat conservation: roosting behaviour of the lesser horseshoe bat <i>Rhinolophus hipposideros</i>
<b>Author :</b>	Knight, T.; Jones, G.
<b>Series :</b>	Endangered Species Research, 8: 79-86
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## Spatial data sources

<b>Year :</b>	2018
<b>Title :</b>	NPWS lesser horseshoe bat database
<b>GIS Operations :</b>	Roosts identified, clipped to SAC boundary. Expert opinion used as necessary to resolve any issues arising
<b>Used For :</b>	1303 (map 2)
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<b>Year :</b>	2007
<b>Title :</b>	Forest Inventory and Planning System (FIPS)
<b>GIS Operations :</b>	Dataset clipped to 2.5km buffer centred on roost locations
<b>Used For :</b>	1303 (map 2)
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## Conservation Objectives for : Towerhill House SAC [002179]

### 1303 Lesser Horseshoe Bat *Rhinolophus hipposideros*

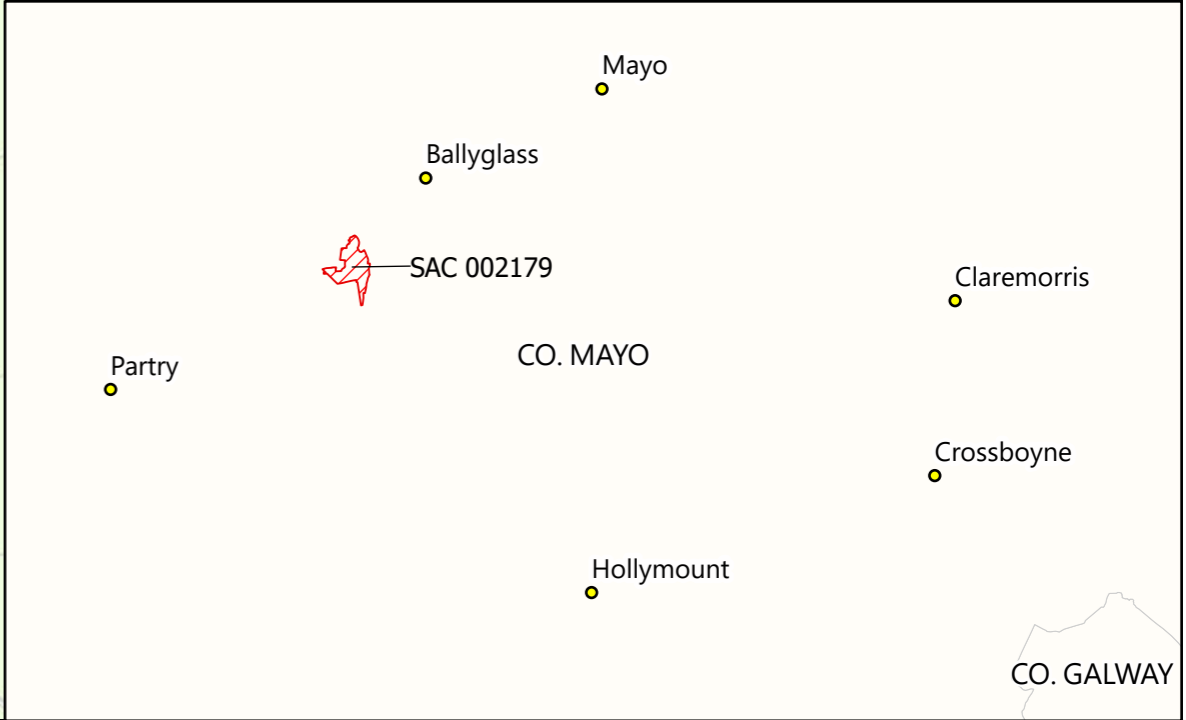
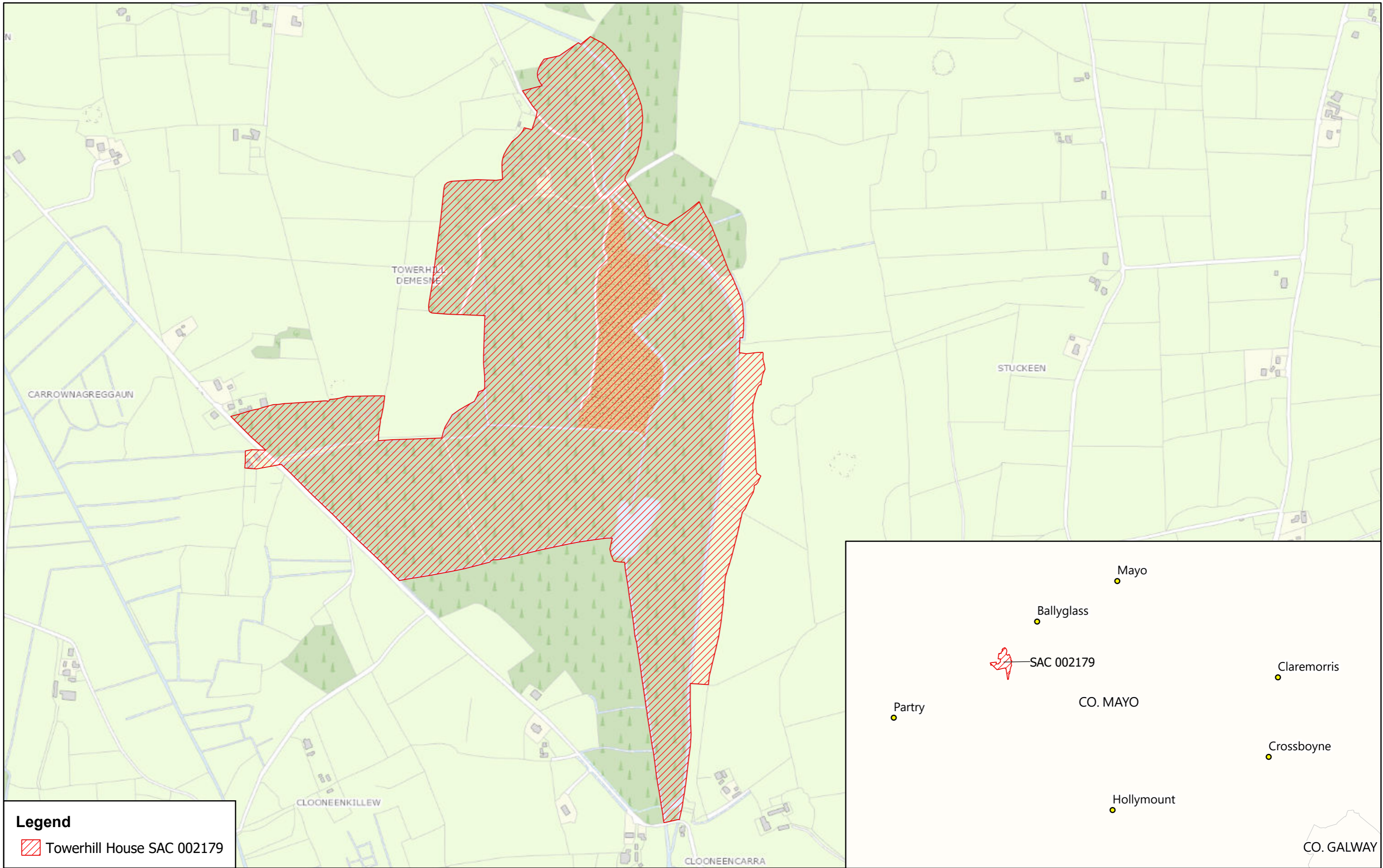
To maintain the favourable conservation condition of Lesser Horseshoe Bat in Towerhill House SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population per roost	Number	Minimum number of 373 bats for the summer roost (roost id. 668 in NPWS database); minimum number of 50 bats for the winter roost (roost id. 682). See map 2	A figure of 100 bats for summer roosts and 50 bats for winter roosts was set as a minimum qualifying standard (MQS) when SACs were being selected for lesser horseshoe bat ( <i>Rhinolophus hipposideros</i> ). NPWS conduct annual counts at each qualifying roost. The qualified mean from the 2012-2016 summer data has been calculated whereby the year with the highest maximum count and the year with the lowest maximum count were removed and the mean of the remaining years was calculated. This mean is set as the target figure for the summer roost (roost id. 668 in NPWS database) in Towerhill House SAC. There is no recent data available for the winter roost in the SAC (roost id. 682); therefore, the MQS is set as the target figure for the winter roost in the SAC. See the conservation objectives supporting document for lesser horseshoe bat (NPWS, 2018) for further information on all attributes and targets
Winter roosts	Condition	No decline	Towerhill House SAC has been selected for lesser horseshoe bat because of the presence of one internationally important winter roost (roost id. 682 in NPWS database). Damage or disturbance to the roost or to the habitat immediately surrounding it will lead to a decline in its condition (Mitchell-Jones et al., 2007)
Summer roosts	Condition	No decline	Towerhill House SAC has been selected for lesser horseshoe bat because of the presence of one internationally important summer roost (roost id. 668 in NPWS database). Damage or disturbance to the roost or to the habitat immediately surrounding it will lead to a decline in its condition (Kelleher and Marnell, 2006)
Auxiliary roosts	Number and condition	No decline	Lesser horseshoe bat populations will use a variety of roosts during the year besides the main summer maternity and winter hibernation roosts. Such additional roosts within the SAC may be important as night roosts, satellite roosts, etc. Night roosts are also considered an integral part of core foraging areas and require protection (Knight and Jones, 2009). In addition, in response to weather conditions for example, bats may use different seasonal roosts from year to year; this is particularly noticeable in winter. A database of all known lesser horseshoe bat roosts is available on the National Biodiversity Data Centre website. NB further unrecorded roosts may also be present within this SAC
Extent of potential foraging habitat	Hectares	No significant decline within 2.5km of qualifying roosts	Lesser horseshoe bats normally forage in woodlands/scrub within 2.5km of their roosts (Schofield, 2008). See map 2 which shows a 2.5km zone around the above roosts and identifies potential foraging grounds
Linear features	Kilometres	No significant loss within 2.5km of qualifying roosts. See map 2	This species follows commuting routes from its roost to its foraging grounds. Lesser horseshoe bats will not cross open ground. Consequently, linear features such as hedgerows, treelines and stone walls provide vital connectivity for this species within 2.5km around each roost (Schofield, 2008)

Light pollution	Lux	No significant increase in artificial light intensity adjacent to named roosts or along commuting routes within 2.5km of those roosts. See map 2	Lesser horseshoe bats are very sensitive to light pollution and will avoid brightly lit areas. Inappropriate lighting around roosts may cause abandonment; lighting along commuting routes may cause preferred foraging areas to be abandoned, thus increasing energetic costs for bats (Schofield, 2008)
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**Legend**  
 Towerhill House SAC 002179

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**MAP 1:  
 TOWERHILL HOUSE SAC  
 CONSERVATION OBJECTIVES  
 SAC DESIGNATION**  
 Map to be read in conjunction with the NPWS Conservation Objectives Document.

**SITE CODE:  
 SAC 002179; version 3.0. CO. MAYO**

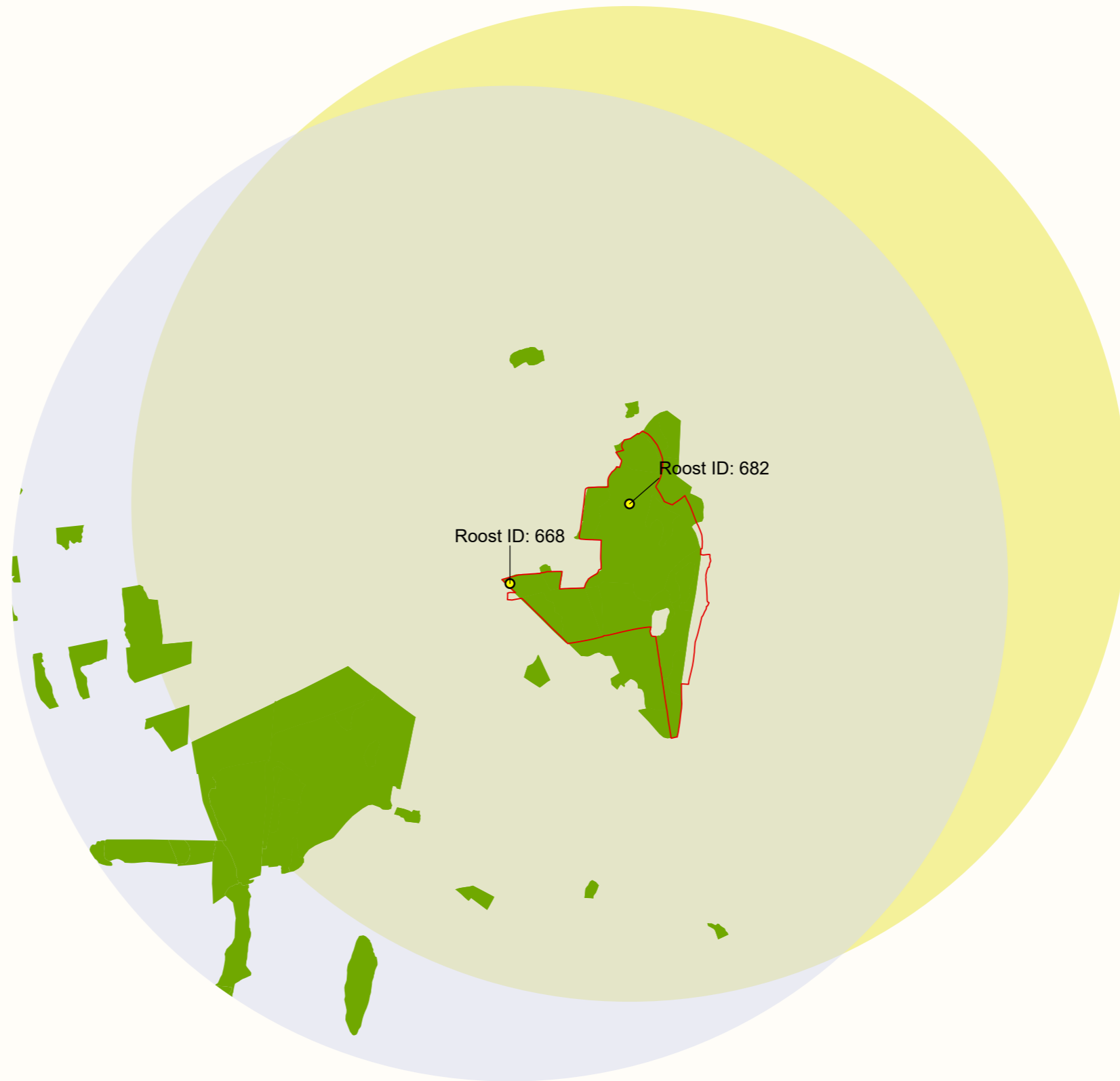
0 80 160 240 320 Meters



The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision.  
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Níl sna teorainneacha ar na léarscáileanna ach nod garshuíomhach ginearálta. Féadfar athbhreithnithe a déanamh ar theorainneacha na gceantar comharthaíthe. Suirbhéarachta Ordonáis na hÉireann Ceadúnas Uimh EN 0059216. © Suirbhéarachta Ordonáis na hÉireann Rialtas na hÉireann

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**Map Version 1  
 Date: June 2018**



**Legend**

- Towerhill House SAC 002179
- OSi Discovery Series County Boundary
- 1303 Lesser Horseshoe Bat *Rhinolophus hipposideros***
- Roost Location
- Roost ID 682 Foraging Range
- Roost ID 688 Foraging Range
- Potential Foraging Grounds