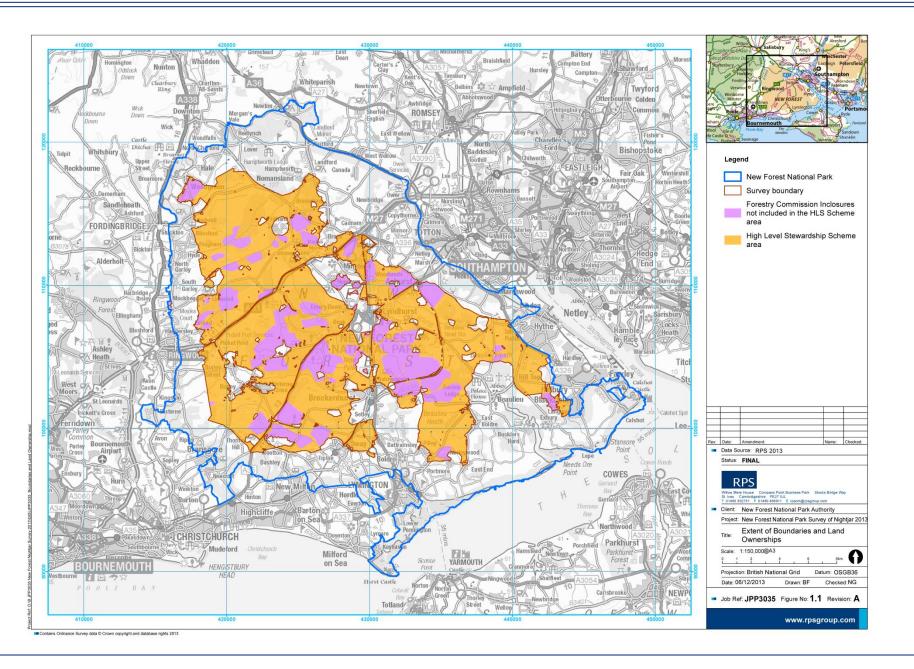






Background to the study

- As part of the HLS agreement there is a requirement to undertake surveys for bird species for which the New Forest Special Protection Area is designated.
- The HLS board identified the requirement for delivery of a comprehensive survey of Nightjar *Caprimulgus europaeus* in 2013 in accordance with the methodology used in the national surveys.
- RPS were commissioned to undertake a survey of breeding Nightjar on land covered by the HLS scheme.
- In addition, survey was also required to cover suitable habitat outside the HLS area but forming part of the Crown Lands managed by the Forestry Commission.
- The objective of the study was to provide a comprehensive and robust dataset.

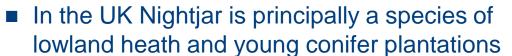




Nightjar



- Nocturnal slightly larger than a thrush
- Churring



- Particularly like woodland-heathland interface and adjacent areas which are rich in invertebrate prey.
- Adaptations to nocturnal feeding



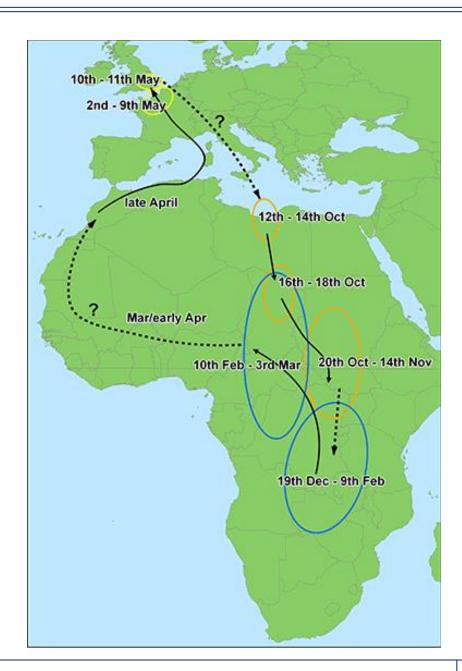
RPS





Migration

- Arrive in May
- Leave in August
- By October reached north Africa
- Spend the winter months in the rainforest of the Democratic Republic of Congo
- Leave the wintering grounds in mid-February





Nightjar in the New Forest



- Designated as a Special Protection Area for several bird species one of which is Nightjar.
- UK population at time of last survey in 2004 was 4,606 territorial males.
- The New Forest held 629 territorial males at the time of the last survey.



Survey Preparation

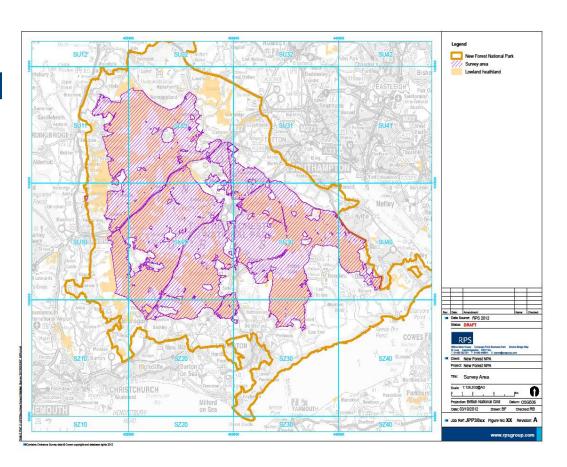
Two phases:

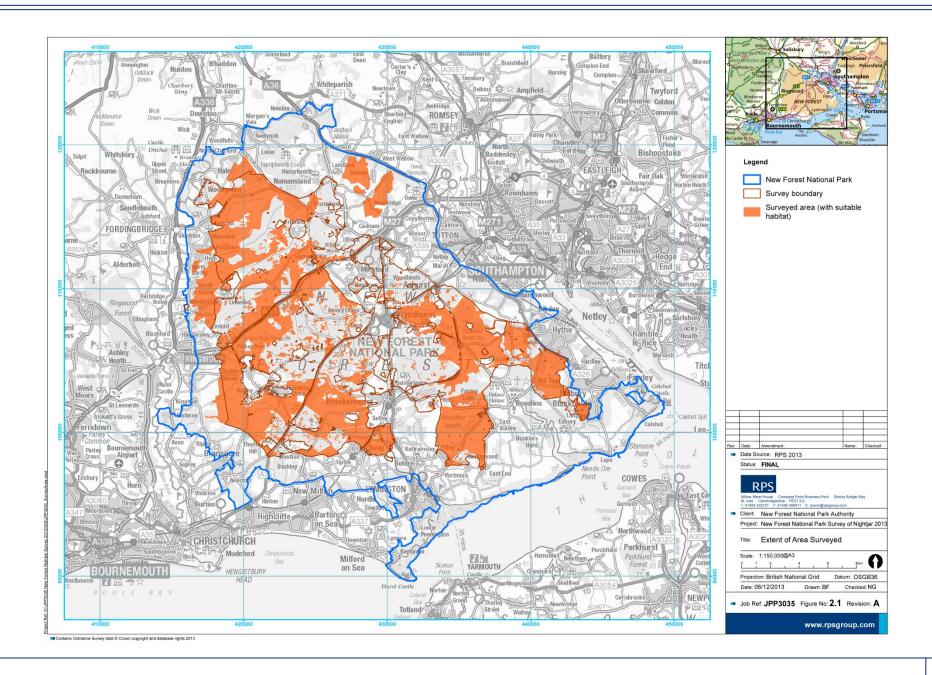
- Identifying suitable habitat to be surveyed.
- Determining survey units and plotting routes.



Area to be surveyed

- GIS to map habitats
- Various datasets supplied by Natural England and the Forestry Commission
- Criteria used to determine habitat

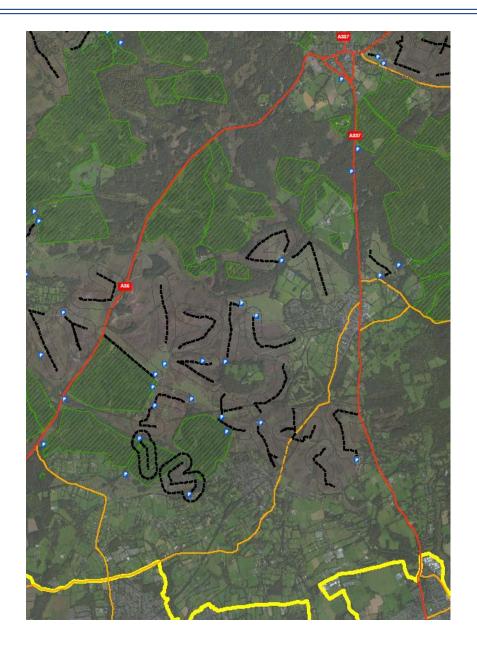






Identifying survey routes

- Criteria from national survey methodology
- Each survey should cover no more than 80ha
- Observer should walk within 200m of all potentially suitable habitat

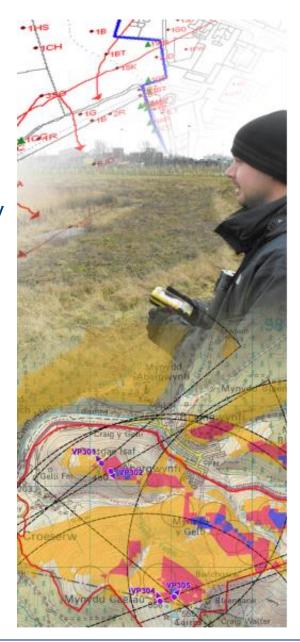




Fieldwork

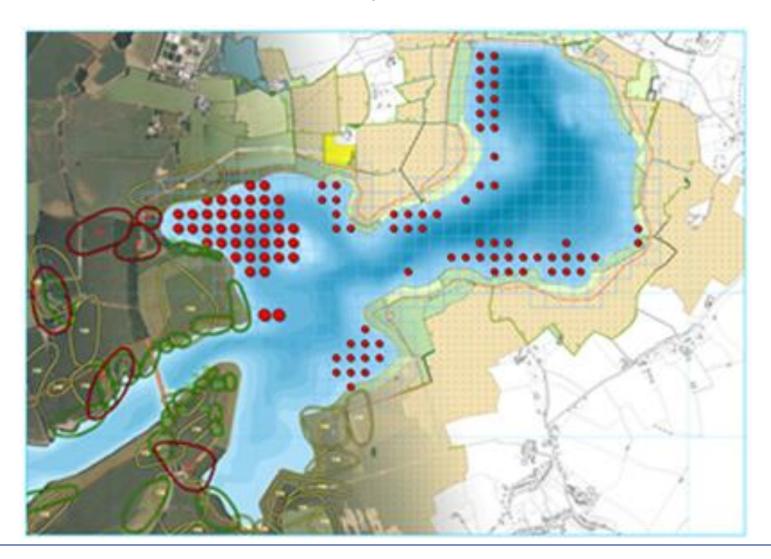
- Two visits between last week of May and mid July
- One visit at dusk and one at dawn
- Recorded on handheld computers directly in GIS





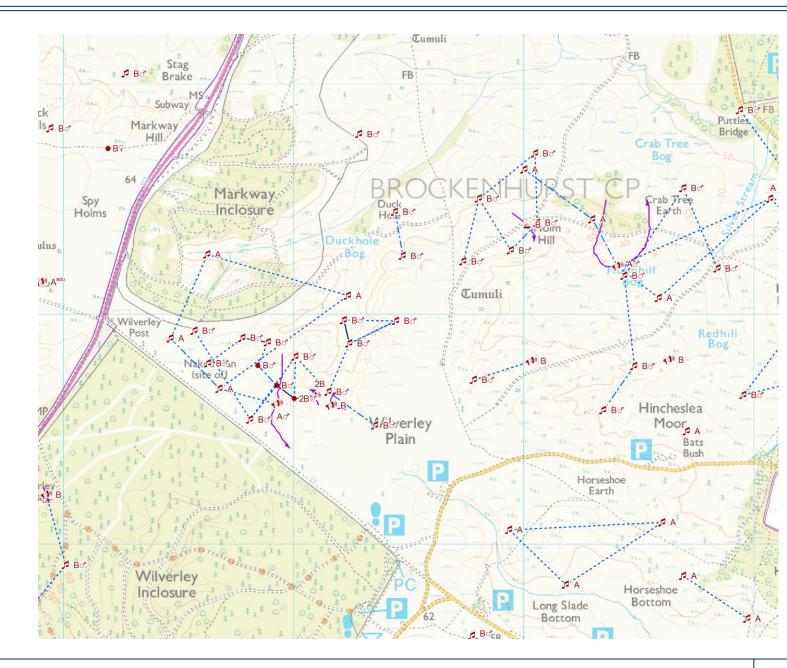


Data analysis



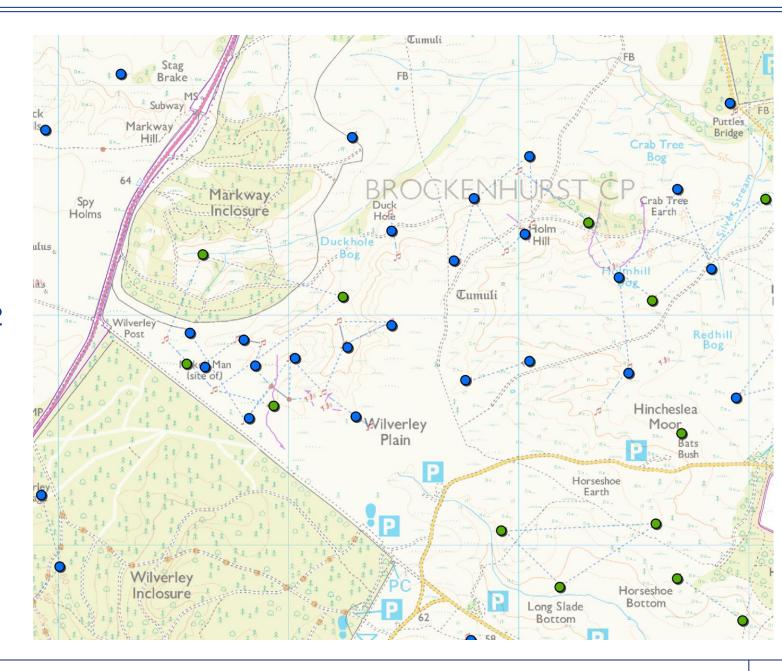


Raw data



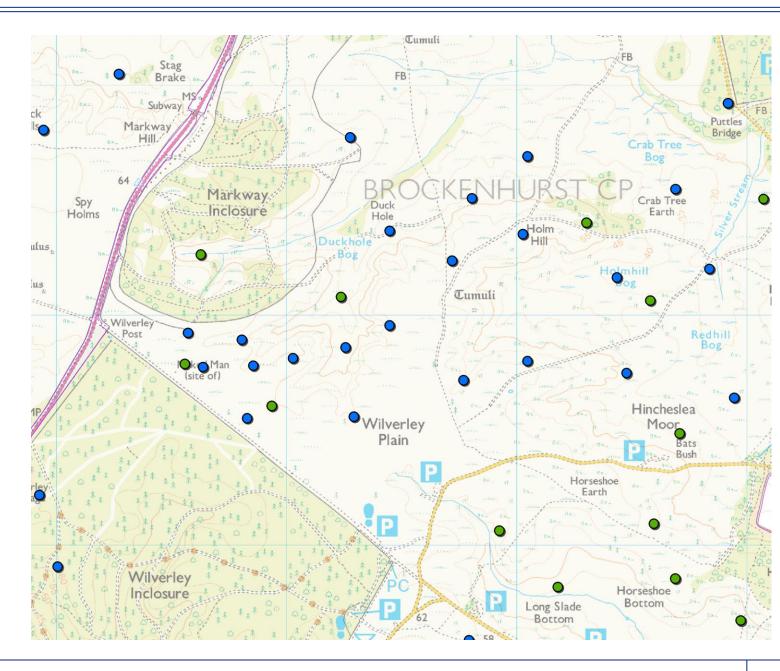


Individual males for visits 1 and 2



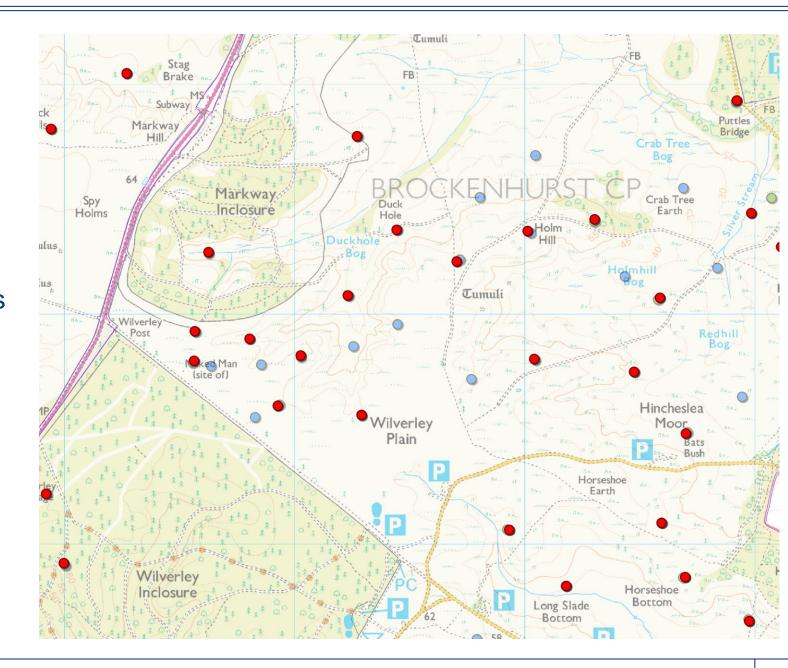


Individual males for visits 1 and 2



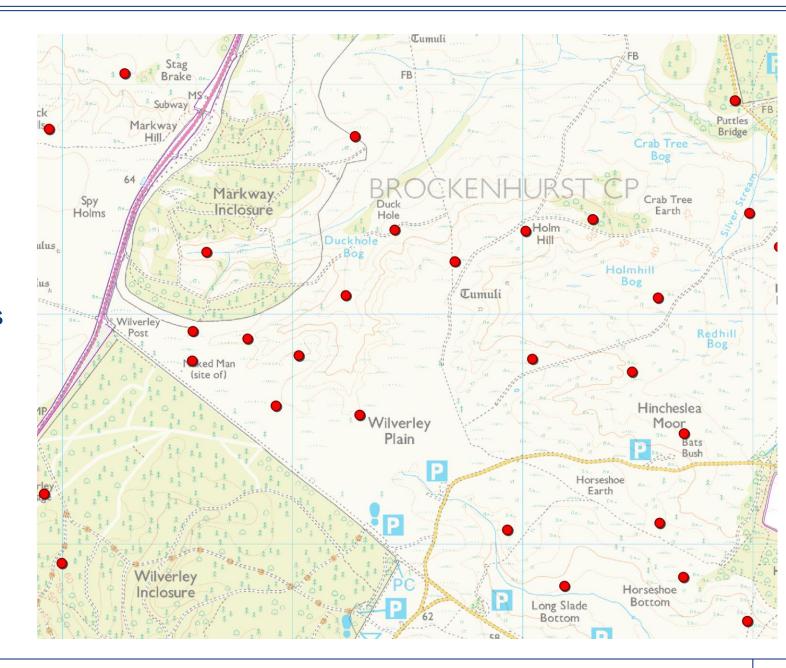


Determine number of territories from clusters of registrations





Define territory centre points



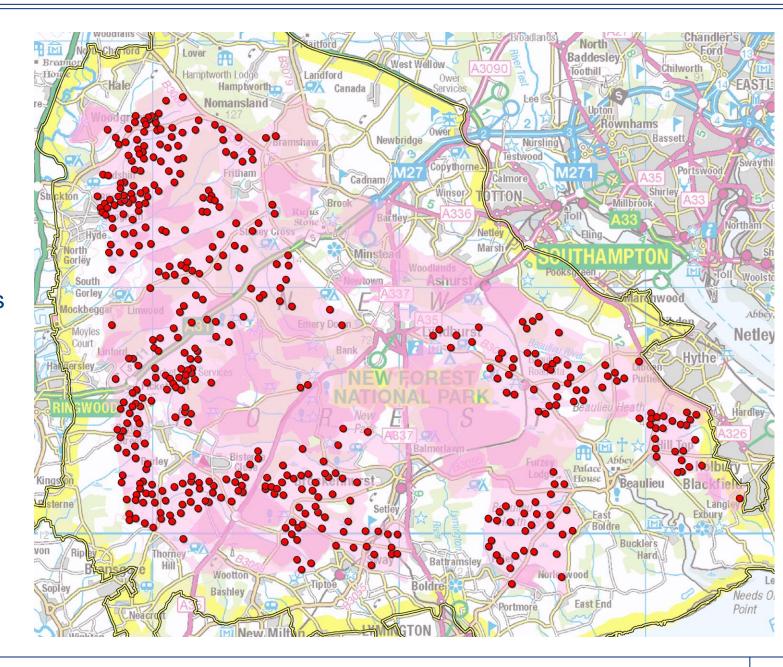


Results

■ Total breeding population of 544.

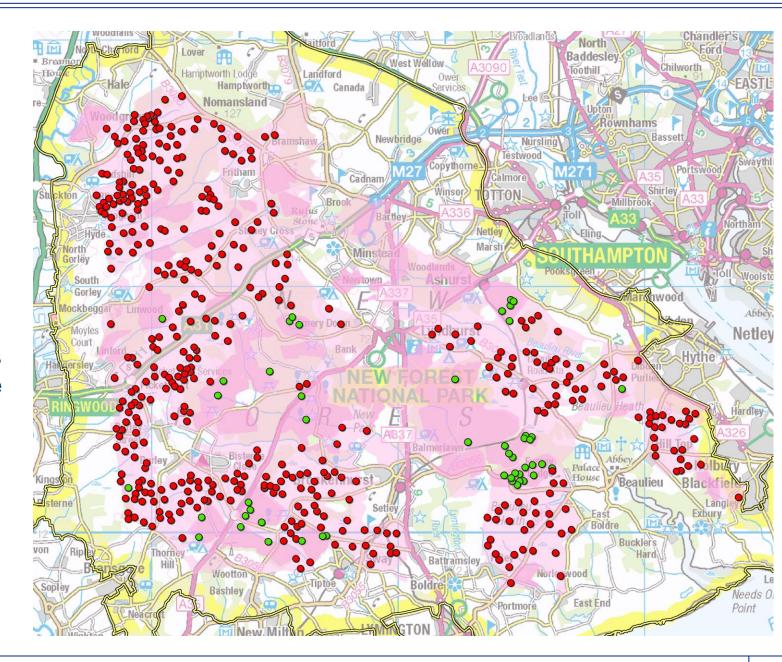


on land
within the
HLS
scheme



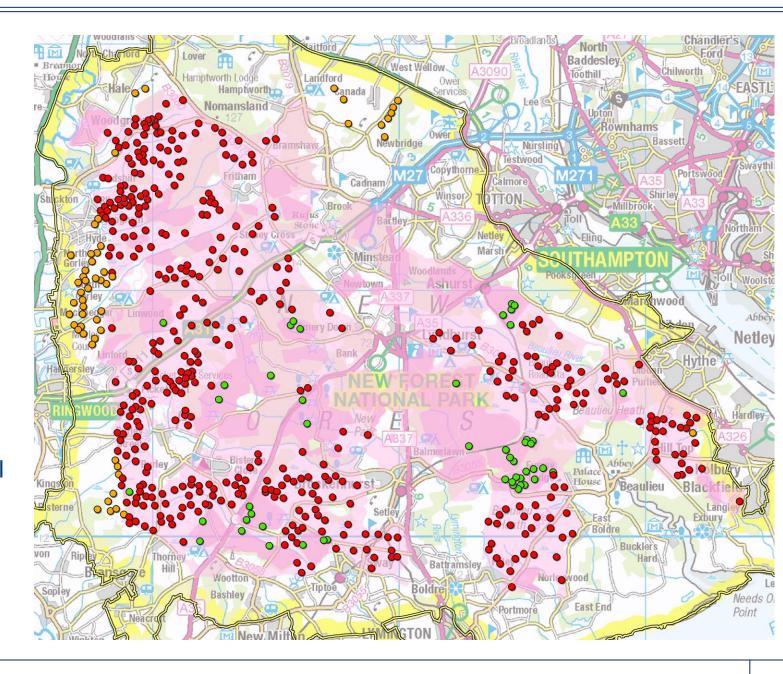


49 territories
within the
forestry
enclosures
outside the
HLS
scheme





A further 54
territories
on land
outside of
these
boundaries
but within
the National
Park.





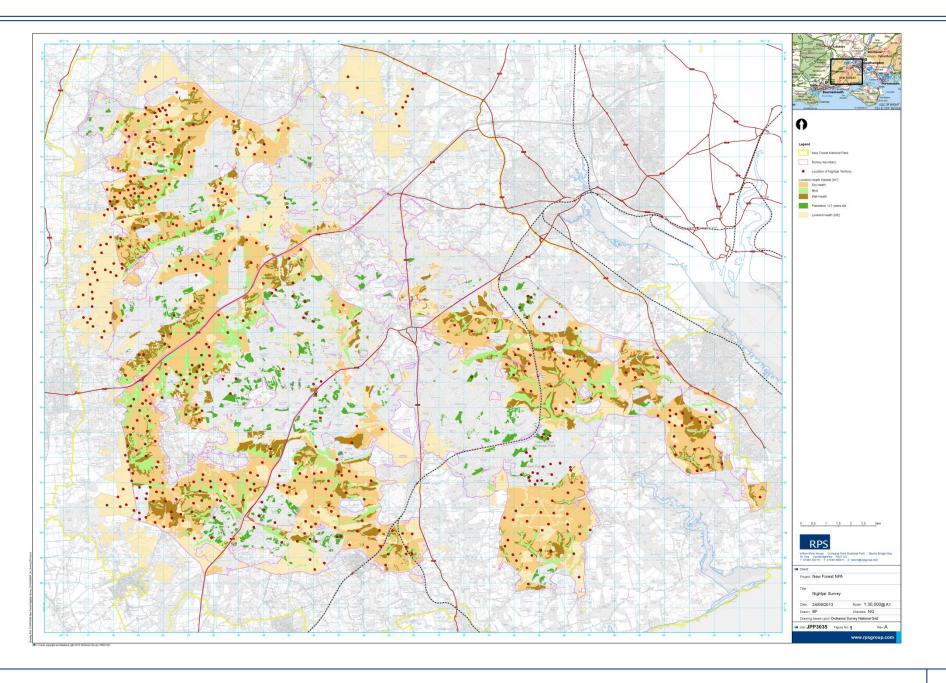
The New Forest Nightjar population

- Given slight variations in technique and the previous survey being undertaken over two years it is considered that the population is stable.
- Based on last national survey in which the population was considered to be 4,606 territorial males the 2013 population represents 12% of the UK breeding population.



Habitat preference

■ 78% of Nightjar territory centres were located on, or within 100m of, dry heath.





Conclusions

The dataset collected provides:

- A robust baseline of the current breeding population of Nightjar
- Detail and methods in inform future surveys of Nightjar
- A basis upon which to assess factors influencing the breeding population and distribution

RPS

