### **Hoofed mammals**

(Artiodactyla)

Mammals that have hooves instead of claws are called ungulates and the wild ungulates present in the British Isles come under the order Artiodactyla. This means that they have an even number of hoofed toes. British hoofed mammals are all herbivorous and eat only vegetation. British wild hoofed species include deer and wild boar.



Image 30: Red deer, image sent in through Mammal Tracker app

# Wild boar Sus scrofa

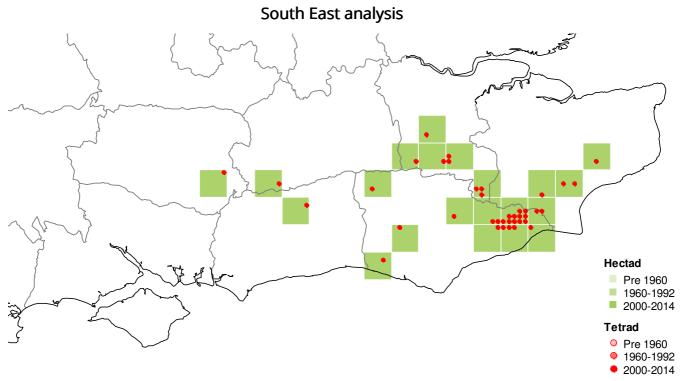


Figure 189: South East distribution of wild boar records, showing three time periods of data at both hectad and tetrad level

In recent decades small populations of wild boar have arisen around the south east of England; escapees from commercial farms and wildlife parks. A particularly strong population of them roam around an area of Sussex near Rye, as can be seen in Figure 189. The alpha hull below shows a general outline of their main range in the region.

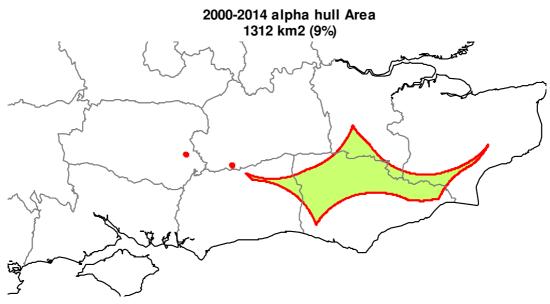


Figure 190: Alpha hull representation of wild boar South East distribution for 2000-2014 records

# Wild boar Sus scrofa

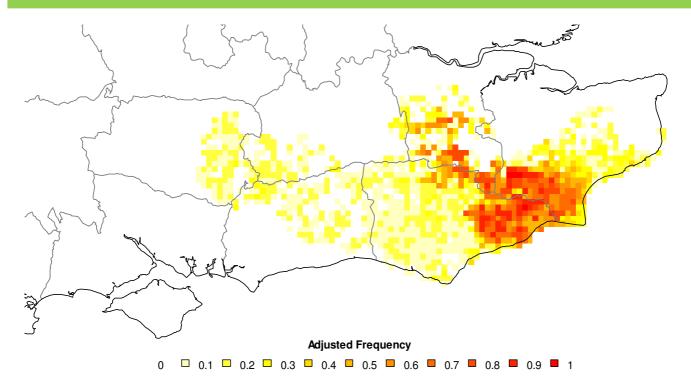


Figure 191: Frescalo map displaying wild boar predicted South East distribution based on 2000-2014 records

The Frescalo map above (Figure 191) shows where wild boar are found in the South East, with the area around the East of Sussex/Kent border containing a higher number of tetrads with records for the species.

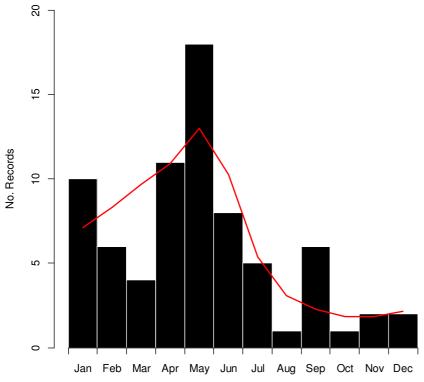


Figure 192: Phenology histogram displaying monthly record submission

Wild boar exist in smaller populations than many British mammal species, but can be found in various pockets of woodland across the British Isles. The data shown on the phenology histogram in Figure 192 reveals a higher number of records being submitted in late spring, early summer (April to June), with a spike in records in May. In common with data seen in other species, this is probably indicative of people being out and about more in the spring and summer months to see the wild boar. Female boars are also out with young in summer, so are more likely to be seen.

### Reeves' muntjac

#### Muntiacus reevesi

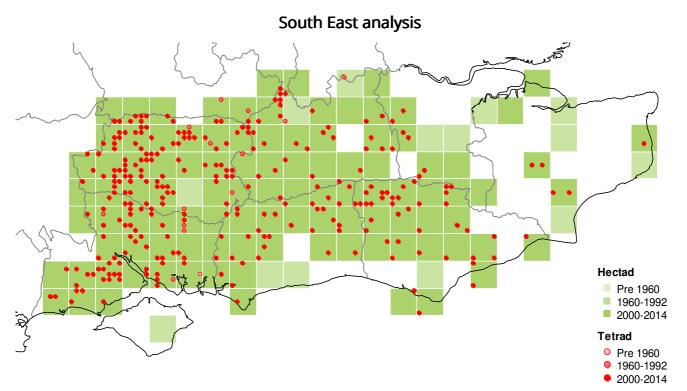


Figure 193: South East distribution of Reeves' muntjac records, showing three time periods of data at both hectad and tetrad level

Muntjac are well established across England, especially in the south, shown by Figure 193 above, which represents the South East. The low number of records in Kent is probably due to the general lack of records we were able to obtain for Kent for this atlas, rather than being representative of the muntjac's range. There are no large populations of deer on the Isle of Wight. However, there are some small groups, with evidence of muntjac believed to have been seen by local sources. There are no current records for muntjac on the island within this atlas and only the one historical record in Figure 193 which dates back to 1960-1992. Figure 194 shows an alpha hull version of the muntjac's range in the South East.

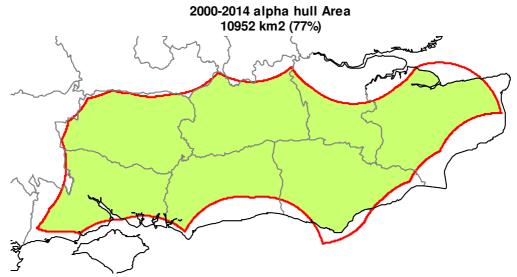


Figure 194: Alpha hull representation of Reeve's muntjac South East distribution for 2000-2014 records

## Reeves' muntjac Muntiacus reevesi

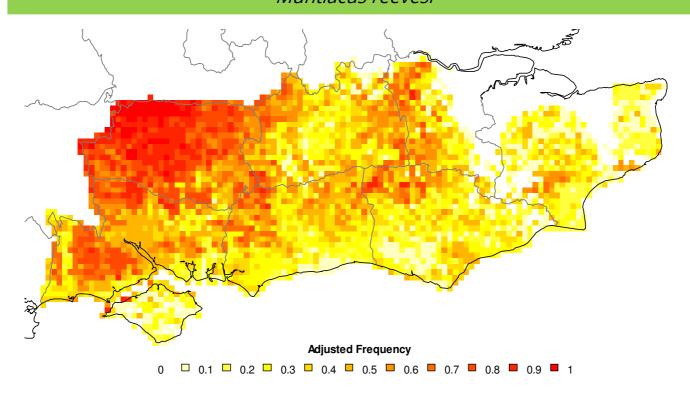


Figure 195: Frescalo map displaying Reeve's muntjac predicted South East distribution based on 2000-2014 records

The muntjac Frescalo model above in Figure 195 shows us the range of this species, with more tetrads containing records shown in the North West of the region.

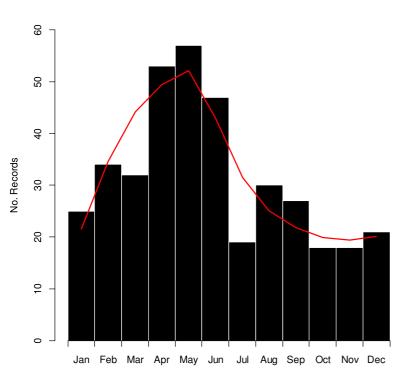


Figure 196: Phenology histogram displaying monthly record submission

Muntjac remain active throughout the year and are commonly seen in any calendar month. This is reflected in the phenology histogram (Figure 196), because whilst there are peaks (April to June) and troughs (October and November), these are less pronounced than in many other mammal phenology histograms. Muntjac are most commonly seen in late spring and early summer. The increase in daylight hours has a significant effect on records as muntjac are more commonly seen at dawn and dusk when many people are travelling to and from work. People are also generally outdoors more at this time of year.

#### Red deer

### Cervus elaphus

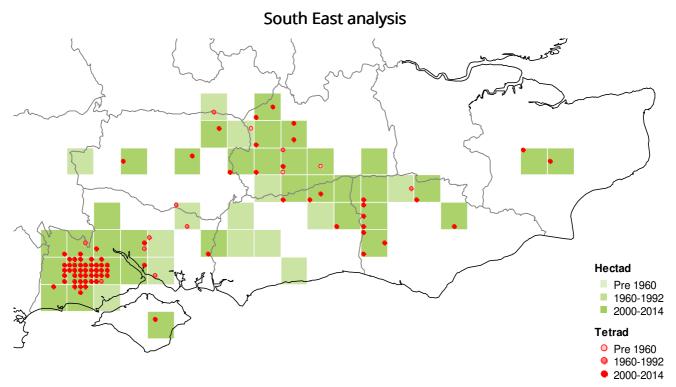


Figure 197: South East distribution of red deer records, showing three time periods of data at both hectad and tetrad level

Red deer can be found scattered in certain areas of the South East, as shown by Figure 197. The clump of tetrads containing records in the south west of the region demonstrates the stronger population that is present within the New Forest National Park, Hampshire.

Red deer are present in smaller numbers on the Isle of Wight; some are escapees from deer farms/wildlife parks, but red deer are thought to have been present on the island anyway. Of the records obtained for this atlas, only one hectad contained records for the Isle of Wight, as shown in Figure 197.

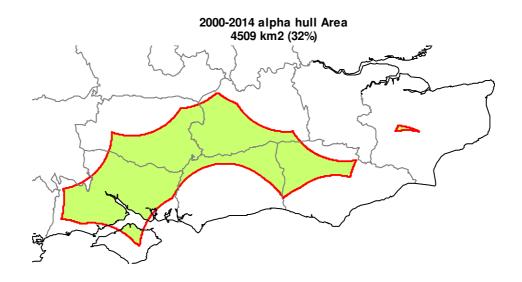


Figure 198: Alpha hull representation of red deer South East distribution for 2000-2014 records

# Red deer Cervus elaphus

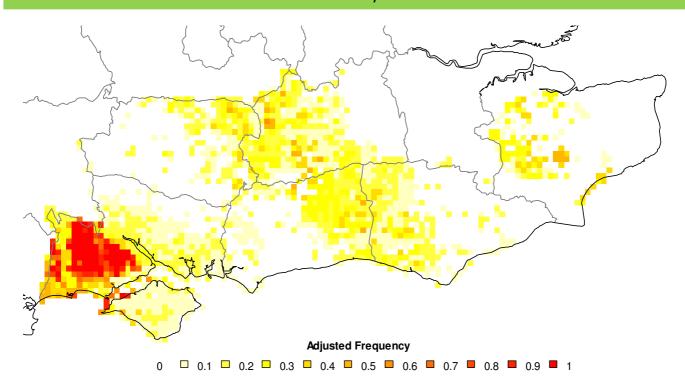


Figure 199: Frescalo map displaying red deer predicted South East distribution based on 2000-2014 records

Figure 199 shows the predicted distribution of red deer. It indicates that their spread in the region is scattered and highlights their New Forest stronghold. The higher proportion of tetrads containing records for the species in this area is demonstrated by darker red squares.

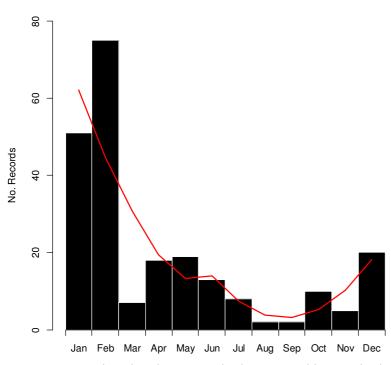


Figure 200: Phenology histogram displaying monthly record submission

The phenology histogram for red deer in Figure 200 reveals a peak in data for records submitted in the winter months, particularly January and February. By comparison, there is a considerable dip in records entered in August and September. Red deer are active throughout the year, but the peak in records coincides with stalking season, when numbers are monitored from October through to February. We would usually expect to see more of a peak in records during the rut, in October, as well as more records in the summer from people being more outdoors, so it is strange that this is not the case.

#### Sika deer

### Cervus nippon

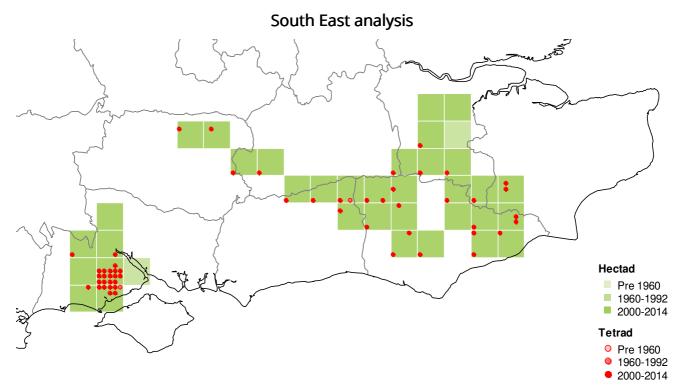


Figure 201: South East distribution of sika deer records, showing three time periods of data at both hectad and tetrad level

The New Forest in Hampshire holds one of England's main concentrations of sika deer. This can be seen in the south west corner of the distribution map in Figure 201. Other than this, the region is not a stronghold for the species, with only a few scattered populations present. The alpha hull in Figure 202 shows the outline of these main areas, but it is important to be aware that due to the way the alpha hull is formed it makes these smaller populations appear larger than they actually are.

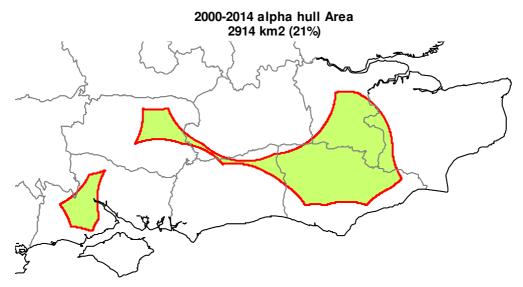


Figure 202: Alpha hull representation of sika deer South East distribution for 2000-2014 records

### Sika deer Cervus nippon

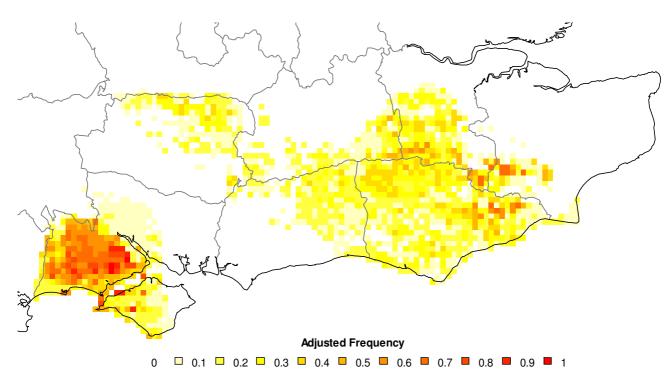


Figure 203: Frescalo map displaying sika deer predicted South East distribution based on 2000-2014 records

Figure 203 shows the Frescalo's predictions of sika deer distribution, with the more populated tetrads belonging to the New Forest, Hampshire, indicated by the red squares. The overlap of records on to the Isle of Wight is caused by the Frescalo model's inability to account for barriers in the landscape, such as the Solent waters, as Frescalo focuses on distance.

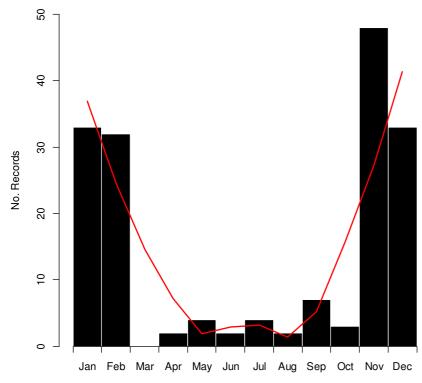


Figure 204: Phenology histogram displaying monthly record submission

The majority of sika deer records are made in winter, between November and February, with the highest number submitted in November (Figure 204). There is a steep decline in records submitted throughout spring and summer, with the fewest records being submitted in March. The spike in data for the winter months is due to the stalking season of deer, when numbers are monitored.

# Fallow deer Dama dama

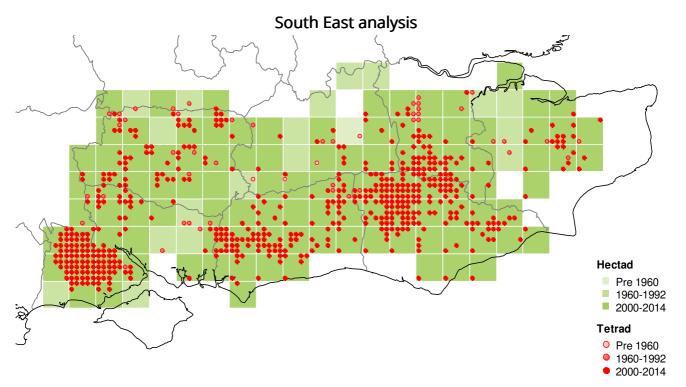


Figure 205: South East distribution of fallow deer records, showing three time periods of data at both hectad and tetrad level

The moderate climate and high density of woodland found in the South East allows many deer species to thrive here. Fallow deer can be found across the region, with denser populations occurring in certain areas such as the New Forest in Hampshire and East Sussex. The alpha hull in Figure 206 outlines this range clearly.

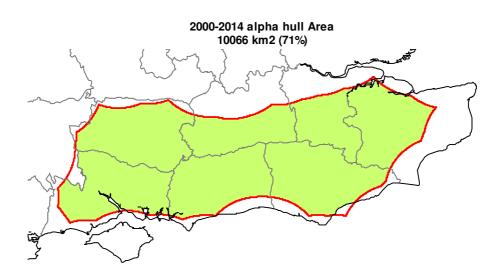


Figure 206: Alpha hull representation of fallow deer South East distribution for 2000-2014 records

### Fallow deer Dama dama

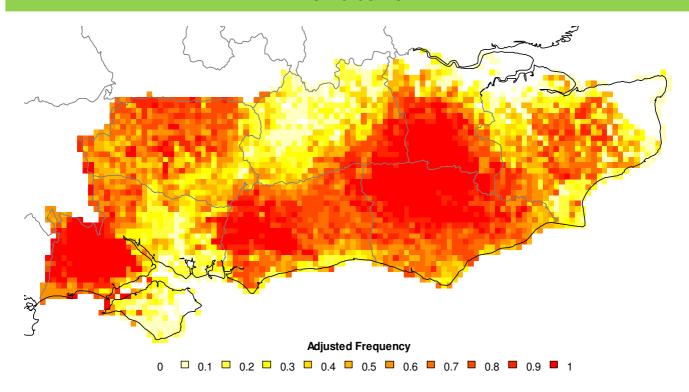


Figure 207: Frescalo map displaying fallow deer predicted South East distribution based on 2000-2014 records

The Frescalo model in Figure 207 indicates the areas of the South East where fallow deer are present in many tetrads in close proximity to one another. These are expressed as dark red. Other yellow areas also show their distribution, but this is where fewer tetrads in one area contain records.

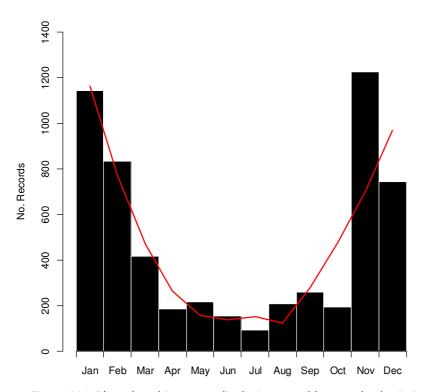


Figure 208: Phenology histogram displaying monthly record submission

The vast majority of fallow deer records are entered in winter, between November and February, with the highest number of records submitted in November (Figure 208). There is a significant decline in data submission throughout spring and summer, with the fewest number of records being submitted in July. Fallow deer are active throughout the year, but the peak in data submission coincides with the stalking season for large deer species, such as sika and red deer.

#### European roe deer

### Capreolus capreolus

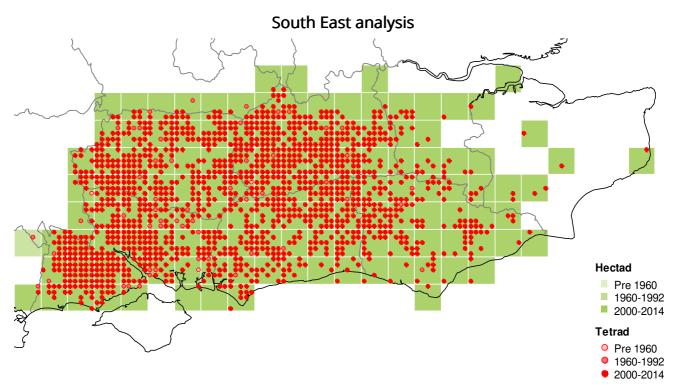


Figure 209: South East distribution of roe deer records, showing three time periods of data at both hectad and tetrad level

Roe deer are found across the South East region, as is expressed in Figure 209. However, the gap in records in Kent is simply due to the lack of records we were able to obtain for Kent and is not representative of the roe's range. The alpha hull of Figure 210 shows a clear overview of their range. Deer being hit by vehicles on roads can be a big problem in some areas and with their wide distribution across the region, roe deer are often involved in this type of accident in the South East.

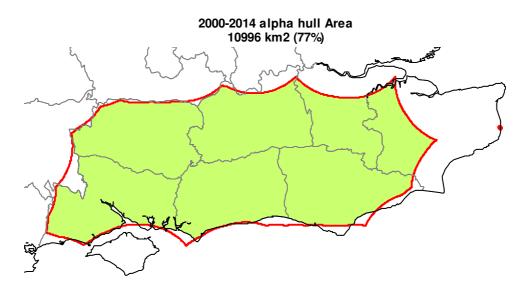


Figure 210: Alpha hull representation of roe deer South East distribution for 2000-2014 records

### European roe deer

### Capreolus capreolus

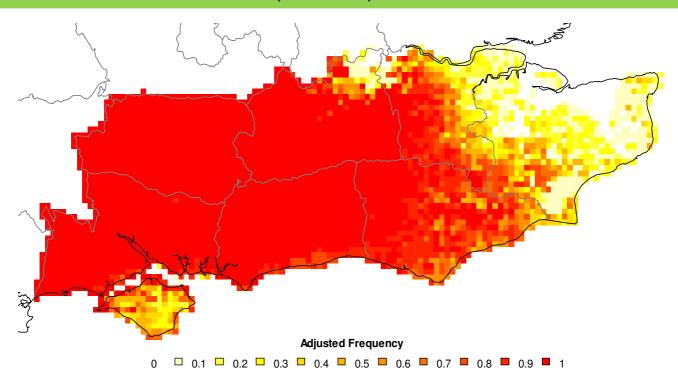


Figure 211: Frescalo map displaying roe deer predicted South East distribution based on 2000-2014 records

The Frescalo prediction of roe deer spread in the South East shows that there are less tetrads with roe deer present in the east of Kent, due to the lack of mammal records we have for Kent in general (Figure 211).

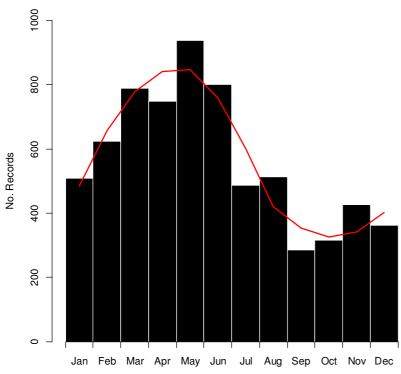


Figure 212: Phenology histogram displaying monthly record submission

The data recorded for roe deer is very similar to that of the muntjac. They are observed throughout the year, and whilst there are peaks (May to June) and troughs (September to December), these are less pronounced than in many other mammal phenology histograms (Figure 212). Roe deer remain active throughout the year, but the increase in data in late spring and early summer is reflected in the increase in daylight hours, meaning roe deer are more easily observed at dawn and dusk.

#### Chinese water deer

### Hydropotes inermis

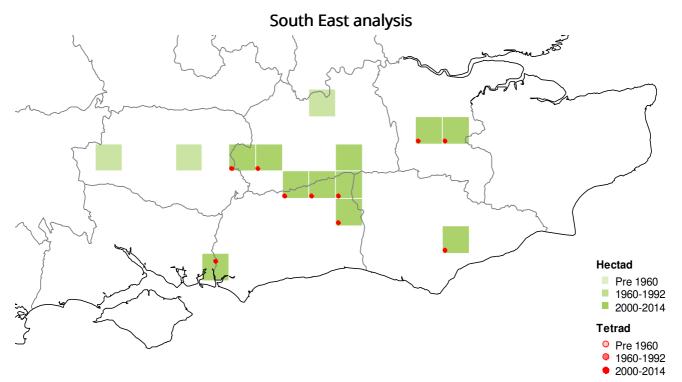


Figure 213: South East distribution of Chinese water deer records, showing three time periods of data at both hectad and tetrad level

Chinese water deer are found in an area comprising Norfolk, Suffolk, Cambridgeshire and Bedfordshire. They would not normally be expected to be seen in the South East, as shown in Figure 213. It may be that individuals have escaped from deer farms or wildlife parks in these areas. Although they are unusual we know these records are accurate as they have been supplied by the British Deer Society. Figure 214 shows an alpha hull of the area where the records have been submitted in the South East. However, this would not be considered their typical range as records are so few.

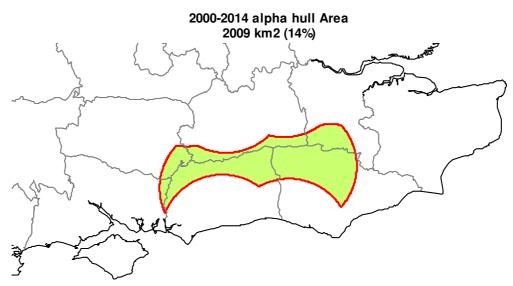


Figure 214: Alpha hull representation of Chinese water deer South East distribution for 2000-2014 records

### Chinese water deer

### Hydropotes inermis

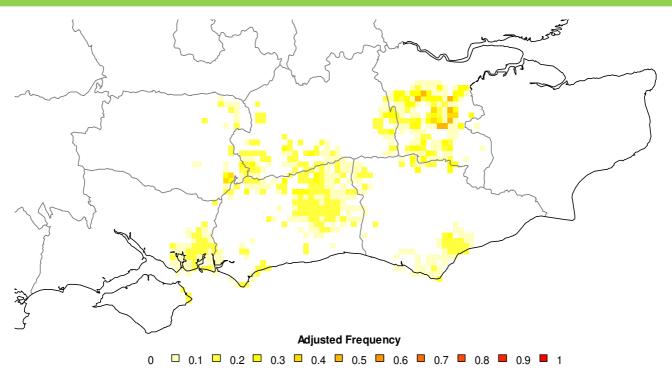
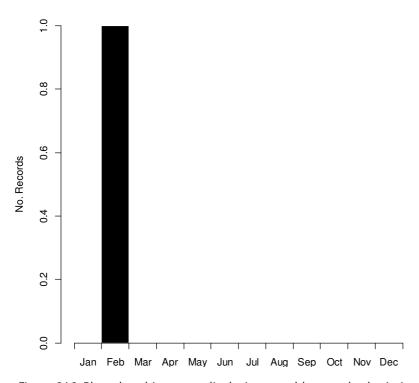


Figure 215: Frescalo map displaying Chinese water deer predicted South East distribution based on 2000-2014 records

The Frescalo map of the random Chinese water deer records predicts where they are found in the South East (Figure 215). Rather than part of their normal range these would be considered as isolated occurrences.



this region. These records were all submitted in February (Figure 216). Chinese water deer are often seen in the earlier months of the year foraging on arable land, as natural food is scarce at this time.

Only a few records of Chinese water deer were submitted in

Figure 216: Phenology histogram displaying monthly record submission