Data Article

Dataset on the concentrations of anticoagulant rodenticides in raptors from the Canary Islands with geographic information

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A R T I C L E   I N F O

Article history:
Received 23 December 2020
Revised 7 January 2021
Accepted 8 January 2021
Available online 13 January 2021

A B S T R A C T

The dataset presented in this article supports “Intensive livestock farming as a major determinant of the exposure to anticoagulant rodenticides in raptors of the Canary Islands (Spain)” (Rial-Berriel et al., 2020). A Geographic Information

DOI of original article: 10.1016/j.scitotenv.2020.144386
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https://doi.org/10.1016/j.dib.2021.106744
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Keywords: Geographic information system Long-eared owl Common kestrel Common buzzard Egyptian vulture SGAR

System (GIS) analysis on the influence of the influence of livestock activity on exposure to anticoagulant rodenticides in raptors in the Canary Islands was performed. This dataset provides geographic information on the localization of each raptor (either positive or negative for anticoagulant rodenticides, \( n = 308 \)), as well as the concentrations of each compound found in their livers. In addition, we present complementary analyses to those included in the main article, such as the detailed analysis of the farming activity influence on anticoagulant rodenticide exposure of raptors, by island and by raptor species.

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Specifications Table

| Subject | Environmental Chemistry |
|---------|-------------------------|
| Specific subject area | Census of raptor specimens for contaminant biomonitoring |
| Type of data | Figures (processed data), and the corresponding raw data (table) |
| How data were acquired | Ultra-high performance liquid chromatography coupled to triple quadrupole mass spectrometry (LC-MS/MS) |
| GPS devices | |
| Data format | Raw and analysed |
| Parameters for data collection | The data were systematically collected in the course of forensic investigations of incidents affecting wildlife. The main conditions for starting the data collection were that: |
| | • The animal was a raptor bird nesting in the Canary Islands, |
| | • Found dead or died/euthanized within a week of its admission to a wildlife recovery center. |
| | • With fresh liver tissue available, |
| | • With georeferenced data of the location where the carcass or severely affected animal was found. |
| Description of data collection | All the available information about the animal (species and subspecies, age, sex, the possible cause of death, etc. . . .), as well as the coordinates of the place where the animal/cadaver was found, collected with a centimetre precision GPS device by the environmental officers, were obtained from the reports of sample collection and the medical histories opened in the wildlife recovery centres of the Canary Islands. The quantification data of anticoagulant rodenticides in raptor were obtained analysing a series of 308 livers from January 2011 to May 2020. |
| Data source location | Institution: Toxicology Unit, Clinical Sciences Department, Universidad de Las Palmas de Gran Canaria |
| | City/Town/Region: Las Palmas de Gran Canaria (Gran Canaria, Canary Islands) |
| | Country: Spain |
| Data accessibility | With the article |
| Related research article | Intensive livestock farming as a major determinant of the exposure to anticoagulant rodenticides in raptors of the Canary Islands (Spain) |
| | https://doi.org/10.1016/j.scitotenv.2020.144386 |

Value of the Data

- The data that we present in this article are very useful to researchers who carry out biomonitoring of pesticides. They will also contribute in a very relevant way to the elaboration of the map of the exposure to rodenticides of raptors in Europe (LIFE APEX projects, European...
Raptor Biomonitoring Facility), as well as to implement the Information Platform for Chemical Monitoring (IPCheM) database, which is the European Commission's reference access point for searching, accessing and retrieving chemical occurrence data collected and managed in Europe.

- By providing not only pollution data, but also the GPS coordinates of 308 raptor specimens, some of them belonging to species very rarely observed in Europe (the case of Eleanora’s falcon and Barbary falcon), allows feeding databases, such as the Census of raptor specimens for pan-European contaminant biomonitoring.

- In addition, the censuses that are currently being carried out in Europe focus in a special way on those species that have a pan-European distribution, since the contamination data in raptors is crossed with those of the human population and in environmental samples of each country. In this work, we provide data from numerous specimens of the species that have been identified as being of greatest interest for this purpose: *Buteo buteo* (n = 53); *Falco tinnunculus* (n = 83); *Tyto alba* (n = 8); *Asio otus* (n = 68); as well as data from many other species of interest.

1. Data Description

The data presented here are part of a larger series of 831 animals that have been investigated for anticoagulant rodenticides in the Canary Islands over a decade (2011–2020), and which are presented in the article by Rial-Berriel et al. [1]. The data detailed at the individual level here focus on the 308 raptors included in that series. We have decided to include all the raptor specimens investigated, both those positive for anticoagulants and those negative, due to the importance of having georeferenced data of the specimens suitable for future analysis of contaminants at a pan-European level. Table 1 contains the details of all the individuals investigated, including species and subspecies, geographical data of their location (island, municipality, and GPS coordinates), and the individual concentrations of the 5 anticoagulant rodenticides detected in the series (brodifacoum, bromadiolone, difenacoum, difethialone, and flocoumafen). The shortest distance from the location of the bird of prey to the nearest cattle farm is also presented and including the type of livestock farmed.

Figs. 1 to 5 present a double panel each. On the one hand, we present the geographical location of all cases (positive and negative for anticoagulant rodenticides) on the map of each of the Canary Islands (with the exception of El Hierro, in which only 2 cases were recorded), and the relationship with the location of medium / large-sized livestock farms, surrounded by a 1.5 km buffer zone (which we consider to coincide with the average home range of the raptor species studied). Additionally, in each of these graphs, the comparative statistics of the distribution of anticoagulant rodenticide values between the groups of animals that were found inside or outside the aforementioned 1.5 km buffer zone of the livestock farms are also presented.

Additionally, detailed analysis is presented for those raptor species in which more than 50 individuals were analysed. In these analyses we present the comparative statistics of the distribution of anticoagulant rodenticide values between the groups of birds that were found inside or outside the 1.5 km-buffer zone of farms: common kestrel (*Falco tinnunculus*, Fig. 6); common buzzard (*Buteo buteo*, Fig. 7); long-eared owl (*Asio otus*, Fig. 8); and Egyptian vulture (*Neophron percnopterus*, Fig. 9).

2. Experimental Design, Materials and Methods

2.1. Sampling

This study was carried out in the Canary Islands, and the samples were taken in the context of the Poisoning Control and Prevention Strategy in the Canaries [2] from 2011 to May 2020.
Table 1
Identification of each bird included in the study, with detailed information about the location where the corpse was found, including GPS coordinates, and about the concentration of anticoagulant rodenticides detected (replicate analysis are provided).

| RAPTOR SPECIES | YEAR | ISLAND | MUNICIPALITY | UTMX | UTMY | BRUDERERACUM measurement 1 | BRUDERERACUM measurement 2 | BRUDERERACUM measurement 1 | BRUDERERACUM measurement 2 | DIFENACOUM measurement 1 | DIFENACOUM measurement 2 | DIFENACOUM measurement 1 | DIFENACOUM measurement 2 | FLOCOUMAFEN measurement 1 | FLOCOUMAFEN measurement 2 | RODENTICIDES nearest farm (m) | Species |
|-----------------|------|--------|-------------|------|------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Accipiter canariensis | 2020 | Gran Canaria | Moya | 454450 | 3304241 | 34.32 | 26.94 | 2.71 | 2.73 | 0.48 | 0.90 | 0.20 | 0.24 | 34.49 | 0.16 | 2 | 315 | Goat/Sheep |
| Accipiter canariensis | 2020 | Gran Canaria | Telde | 458081 | 3263324 | 12.54 | 9.66 | 0.80 | 0.81 | 0.16 | 0.44 | 0.36 | 0.34 | 318 | 3 | 340 | Cattle |
| Accipiter canariensis | 2019 | Telde | Güimar | 359495 | 315797 | 440.00 | 152.00 | 3.89 | 3.34 | 400 | 0 | 0 | 340 | 0 | 0 | 340 | Cattle |
| Accipiter canariensis | 2020 | Gran Canaria | Las Palmas de Gran Canaria | 454433 | 3307984 | 2.45 | 2.87 | 0.22 | 0.24 | 2.89 | 0.24 | 34.49 | 0.16 | 2 | 315 | Goat/Sheep |
| Accipiter canariensis | 2019 | Telde | Tenerife | 453896 | 3014216 | 5.34 | 6.26 | 0.36 | 0.44 | 11.8 | 1 | 240 | Goat/Sheep |
| Accipiter canariensis | 2014 | Moya | 460131 | 3303830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3722 | Goat/Sheep |
| Accipiter canariensis | 2015 | Arucas | 432827 | 3094128 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7585 | Pig |
| Actitis hypoleucos | 2020 | Fuerteventura | Agüimes | 457232 | 3304402 | 31.07 | 36.47 | 2.00 | 2.62 | 28.00 | 30.70 | 0.80 | 1.00 | 67.13 | 4 | 358 | Goat/Sheep |
| Actitis hypoleucos | 2020 | Gran Canaria | La Alto de los Nidos | 465730 | 3306039 | 64.68 | 55.34 | 5.70 | 6.18 | 11.90 | 12.30 | 40.80 | 40.20 | 61.80 | 2 | 277 | Pig |
| Actitis hypoleucos | 2018 | La Gomera | San Sebastián de la Gomera | 393179 | 310552 | 20.56 | 15.46 | 33.10 | 40.25 | 40.80 | 2 | 340 | Goat/Sheep |
| Actitis hypoleucos | 2019 | Gran Canaria | San Bartolomé de Tirajana | 446494 | 3073783 | 34.48 | 42.96 | 2.00 | 2.18 | 40.80 | 2 | 340 | Goat/Sheep |
| Actitis hypoleucos | 2019 | Gran Canaria | Santa María de Guía | 457746 | 3307889 | 21.30 | 26.42 | 3.05 | 3.56 | 44.44 | 44.44 | 0.45 | 0.56 | 32.1 | 4 | 420 | Cattle |
| Actitis hypoleucos | 2020 | Gran Canaria | San Mateo | 465964 | 3308316 | 1.87 | 2.13 | 40.00 | 45.40 | 45.00 | 2 | 425 | Pig |
| Actitis hypoleucos | 2020 | Moya | 444454 | 3119773 | 207.46 | 258.74 | 0.30 | 0.38 | 245.84 | 3 | 580 | Goat/Sheep |
| Actitis hypoleucos | 2019 | La Gomera | Vallehermoso | 273781 | 317315 | 8.18 | 10.18 | 3.17 | 3.43 | 24.9 | 2 | 594 | Pig |

(continued on next page)
| RAPTOR SPECIES | YEAR | ISLAND | MUNICIPALITY | UTMX | UTMY | BROMADIOLONE measurement 1 | BROMADIOLONE measurement 2 | Bromadiolone measurement 3 | Difenacoum measurement 1 | Difenacoum measurement 2 | Difenacoum measurement 3 | Flucythrin measurement 1 | Flucythrin measurement 2 | CAS of Flucythrin | NS (IDENTITIES) | Distance to the nearest farm (m) | Type of livestock |
|----------------|------|---------|--------------|------|------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------|-----------------------------|-----------------|
| Asio canariensis | 2020 | Gran Canaria | Agüimes | 487390 | 3185446 | 8.40 | 6.40 | 1.25 | 1.55 | 8.9 | 2 | 120 | Pork |
| Asio canariensis | 2020 | Gran Canaria | San Sebastián de la Gomera | 289148 | 3184430 | 71.34 | 56.64 | | | | | | | | | |
| Asio canariensis | 2020 | Gran Canaria | Arrecife | 448896 | 3111189 | 44.92 | 34.64 | | | | | | | | | |
| Asio canariensis | 2021 | Gran Canaria | Los Pinos de Canarias | 457574 | 3301765 | 162.96 | 113.32 | 0.62 | 0.79 | 0.59 | 0.71 | 320.64 | 3 | 540 | Pork |
| Asio canariensis | 2021 | Gran Canaria | Garachico | 328559 | 3106215 | 13.04 | 17.24 | | | 2.72 | 3.80 | | | | | |
| Asio canariensis | 2021 | Tenerife | Puerto de la Cruz | 332484 | 3177907 | 1.01 | 2.39 | 4.75 | 4.85 | 1.97 | 1.31 | | | | | |
| Asio canariensis | 2021 | Tenerife | Hacienda de las Nieves | 332484 | 3177907 | 1.01 | 2.39 | 4.75 | 4.85 | 1.97 | 1.31 | | | | | |
| Asio canariensis | 2021 | Tenerife | Garachico | 327008 | 3130844 | 39.34 | 49.04 | | | 11.81 | 16.32 | | | | | |
| Asio canariensis | 2021 | Tenerife | Garachico | 327008 | 3130844 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | Garachico | 327008 | 3130844 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | Garachico | 327008 | 3130844 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | Garachico | 333646 | 3130244 | 12.55 | 15.05 | 86.04 | 74.06 | 2.56 | 1.22 | 67.51 | 3 | 130 | Cattle |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | 21.46 | 26.35 | 15.66 | 13.34 | 2.35 | 2.65 | 41.25 | 3 | 700 | Pork |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
| Asio canariensis | 2021 | Tenerife | La Gomera | 348624 | 3130111 | | | | | | | | | | | |
### Table 1 (continued)

| RAPTOR SPECIES | YEAR | ISLAND | MUNICIPIETY | UTMX | UTMY | BRODIFACOUM measurement 1 | BRODIFACOUM measurement 2 | BROMADOCOUM measurement 1 | BROMADOCOUM measurement 2 | DIFETHIALONE measurement 1 | DIFETHIALONE measurement 2 | EUCOUMENIN measurement 1 | EUCOUMENIN measurement 2 | % DIEPENTHIOSE | Distance to the nearest farm (m) | Type of livestock |
|----------------|------|--------|-------------|------|------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|-------------------|-----------------|
| *Asio canariensis* | 2019 | Gran Canaria | Arucas | 448362 | 3132187 | 47.05 | 55.23 | 1.62 | 1.98 | 3.25 | 3.15 | 14.04 | 16.04 | 717 | 1 | Goat/Sheep |
| *Asio canariensis* | 2019 | Tenerife | Gualtefe | 327629 | 350211 | 9.14 | 10.74 | 3.45 | 3.67 | 11.5 | 2 | 760 | Cattle |
| *Asio canariensis* | 2017 | Gran Canaria | Las Palmas de Gran Canaria | 456417 | 383065 | 111.81 | 131.25 | | | | | | | | | | |
| *Asio canariensis* | 2020 | Gran Canaria | Garafía | 437792 | 330461 | 156.22 | 191.38 | 1.36 | 1.64 | 0.68 | 0.52 | 4.04 | 4.04 | 175.1 | 4 | 890 | Cattle |
| *Asio canariensis* | 2019 | Gran Canaria | Telde | 457563 | 3064177 | 16.04 | 18.04 | 4.05 | 5.25 | 22.54 | 2 | 880 | Cattle |
| *Asio canariensis* | 2020 | Gran Canaria | Mogán | 444415 | 330664 | 32.57 | 38.23 | 2.94 | 3.12 | 1.89 | 1.15 | 0.27 | 0.20 | 39.63 | 4 | 812 | Pork |
| *Asio canariensis* | 2020 | Gran Canaria | Mogán | 443379 | 311926 | 9.53 | 11.19 | | | | | | | | | | |
| *Asio canariensis* | 2020 | Gran Canaria | Santa María de Gáldar | 451338 | 310197 | 27.49 | 32.27 | 9.17 | 9.73 | 0.65 | 0.69 | 48 | 3 | 1904 | Goat/Sheep |
| *Asio canariensis* | 2016 | Gran Canaria | Las Palmas de Gran Canaria | 451480 | 300678 | 136.75 | 166.53 | 0.74 | 0.81 | 2.78 | 2.36 | 73.2 | 1 | 1115 | Goat/Sheep |
| *Asio canariensis* | 2016 | Gran Canaria | Las Palmas de Gran Canaria | 451480 | 300678 | 67.34 | 78.06 | | | | | | | | | | |
| *Asio canariensis* | 2020 | Gran Canaria | Valverde | 451398 | 308516 | 5.94 | 6.66 | 3.84 | 3.06 | 2.16 | 2.30 | 0.84 | 0.84 | 3.4 | 2 | 1940 | Goat/Sheep |
| *Asio canariensis* | 2019 | Gran Canaria | Arucas | 446842 | 311251 | 5.94 | 6.66 | 3.84 | 3.06 | 2.16 | 2.30 | 0.84 | 0.84 | 3.4 | 2 | 1940 | Goat/Sheep |
| *Asio canariensis* | 2016 | La Gomera | Vallehermoso | 275081 | 311558 | 148.08 | 157.18 | 117.22 | 121.45 | 117.22 | 121.45 | 117.22 | 121.45 | 556.3 | 2 | 1104 | Pork |
| *Asio canariensis* | 2019 | La Gomera | Vallehermoso | 275081 | 311760 | 37.78 | 28.66 | 3.68 | 3.91 | 37.5 | 2 | 1105 | Pork |
| *Asio canariensis* | 2016 | La Gomera | Tijarafe | 444097 | 300946 | 264.39 | 285.57 | 75.23 | 75.61 | 389.31 | 2 | 3489 | Cattle |
| *Asio canariensis* | 2017 | Gran Canaria | San Mateo | 444207 | 308578 | 119.11 | 126.66 | 32.64 | 34.65 | 3.72 | 3.91 | 48.12 | 3 | 3083 | Cattle |
| *Asio canariensis* | 2016 | La Gomera | Agaete | 276036 | 318084 | 18.89 | 19.57 | 15.23 | 15.57 | 25.13 | 2 | 1562 | Pork |
| *Asio canariensis* | 2018 | Tenerife | Urdal de los Vinos | 335162 | 317702 | 61.68 | 68.48 | | | | | | | | | | |
| *Asio canariensis* | 2018 | Tenerife | Urdal de los Vinos | 334568 | 319044 | 12.56 | 14.46 | 1.38 | 1.62 | 5.15 | 5.31 | 2 | 605 | Cattle |
| *Asio canariensis* | 2019 | Tenerife | Telde | 458417 | 300963 | 30.56 | 35.64 | | | | | | | | | | |
| *Asio canariensis* | 2017 | Tenerife | La Orotava | 348544 | 319035 | 16.06 | 17.24 | 35.05 | 38.08 | 23.1 | 1 | 2000 | Cattle |
| *Asio canariensis* | 2017 | Tenerife | La Orotava | 348601 | 319071 | 20.56 | 23.64 | | | | | | | | | | |
| *Asio canariensis* | 2017 | Gran Canaria | Las Palmas de Gran Canaria | 445837 | 308694 | 14.16 | 15.04 | | | | | | | | | | |

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| BIRD SPECIES | YEAR | ISLAND | MUNICIPALITY | UTMX | UTMY | BREEDER'S CUMULATIVE measurement | BREEDER'S CUMULATIVE measurement 2 | BREEDER'S CUMULATIVE measurement | BREEDER'S CUMULATIVE measurement | DIRECTIONAL measurement | DIRECTIONAL measurement 2 | DIRECTIONAL measurement | DIRECTIONAL measurement 2 | ELECTROMAGNETIC measurement | ELECTROMAGNETIC measurement 2 | No. IDENTITIES | Distance to the nearest farm (m) | Type of livestock |
|--------------|------|--------|--------------|------|------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-----------------|----------------------------|-----------------|----------------------------|-----------------|----------------------------|
| *Asio otus* canariensis | 2020 | Gran | Arucas | 448585 | 397747 | 0 | 0 | 0 | 0 | 3430 | Goat/Sheep | 0 | 0 | 2430 | Goat/Sheep |
| *Asio otus* canariensis | 2017 | Tenerife | Icod de los Vinos | 333662 | 394549 | 230.08 | 254.20 | 456.37 | 569.17 | 10.28 | 10.52 | 590.25 | 3 | 2794 | Goat/Sheep |
| *Asio otus* canariensis | 2011 | Gran | Santa María de Guía | 437802 | 3144263 | 68.89 | 88.87 | 5.67 | 7.33 | 6.6 | 1 | 3494 | Cattle |
| *Asio otus* canariensis | 2007 | Tenerife | El Tanque | 325334 | 3105489 | 0 | 0 | 0 | 0 | 306 | 3057 | 0 | 0 | 1276 | Pork |
| *Asio otus* canariensis | 2009 | Gran | Tablazo | 463042 | 3084640 | 111 | 111 | 111 | 111 | 120 | 120 | 120 | 120 | Pig |
| *Asio otus* canariensis | 2008 | La Gomera | Vallehermoso | 274847 | 317773 | 0 | 0 | 0 | 0 | 4905 | Pig |
| *Asio otus* canariensis | 2020 | Gran | San Mateo | 44242 | 305399 | 0 | 0 | 0 | 0 | 4130 | Pork |
| *Asio otus* canariensis | 2020 | Tenerife | Santa Cruz de Tenerife | 385796 | 310345 | 0 | 0 | 0 | 0 | 4356 | Goat/Sheep |
| *Asio otus* canariensis | 2007 | Tenerife | El Tanque | 352118 | 3150496 | 0 | 0 | 0 | 0 | 4506 | Pork |
| *Asio otus* canariensis | 2020 | La Palma | Tegueste | 640216 | 321252 | 0 | 0 | 0 | 0 | 4788 | Goat/Sheep |
| *Asio otus* canariensis | 2007 | Tenerife | El Tanque | 324484 | 313846 | 6.32 | 7.88 | 0 | 0 | 785 | Cattle |
| *Asio otus* canariensis | 2018 | La Gomera | La Orotava | 284946 | 311434 | 23.86 | 28.88 | 0 | 0 | 620 | Pork |
| *Asio otus* canariensis | 2018 | La Gomera | San Sebastián de la Gomera | 284356 | 310908 | 1.34 | 1.34 | 0 | 0 | 620 | Pork |
| *Asio otus* canariensis | 2009 | Fuerteventura | Betancuria | 587266 | 3136460 | 2.57 | 2.57 | 0 | 0 | 7890 | Goat/Sheep |
| *Bubo bubo* insularis | 2020 | Gran | Iniesta | 456805 | 308556 | 7.02 | 9.08 | 1.84 | 1.56 | 0 | 0 | 310 | Goat/Sheep |
| *Bubo bubo* insularis | 2015 | Gran | Valleseco | 446054 | 3084810 | 0 | 0 | 0 | 0 | 365 | Pork |
| *Bubo bubo* insularis | 2016 | Gran | Valleseco | 446054 | 3084810 | 0 | 0 | 0 | 0 | 480 | Pork |
| *Bubo bubo* insularis | 2004 | Gran | Teror | 445091 | 310357 | 0 | 0 | 0 | 0 | 580 | Goat/Sheep |
| *Bubo bubo* insularis | 2014 | Gran | Teror | 447491 | 3102127 | 0 | 0 | 0 | 0 | 580 | Goat/Sheep |
| *Bubo bubo* insularis | 2018 | La Gomera | Vallehermoso | 278313 | 3114763 | 34.68 | 34.68 | 34.68 | 34.68 | 34.68 | 34.68 | 625 | Pork |

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| RAINFOREST SPECIES | YEAR | ISLAND | MUNICIPALITY | UTMX | UTMY | BROMADIOLONE measurement 1 | BROMADIOLONE measurement 2 | Bromadiolone measurement 1 | Bromadiolone measurement 2 | DETECTION measurement 1 | DETECTION measurement 2 | DETECTION measurement 1 | DETECTION measurement 2 | DETECTION measurement 1 | DETECTION measurement 2 | DISTANCE TO THE NEAREST TREE (m) | TYPE OF TREE |
|--------------------|------|--------|--------------|------|------|----------------------------|----------------------------|---------------------------|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|
| Buto bodo bodo    | 2019 | Gran Canaria | San Mateo | 448859 | 308882 | 2.34                          | 2.52                          | 1.70                        | 6.14                        | 0.59            | 2               | 735             | Pork            |
| Buto bodo bodo    | 2020 | Gran Canaria | San Mateo | 465022 | 305943 | 68.13                         | 94.97                         | 148.59                     | 158.65                     | 20.27           | 21.53           | 254.07          | Sheep          |
| Buto bodo bodo    | 2019 | Gran Canaria | Fuerteventura | 682936 | 350047 | 8.46                          | 5.84                          | 1.47                        | 1.27                        | 6.70            | 2               | 810             | Pork            |
| Buto bodo bodo    | 2016 | Gran Canaria | Valverde | 466221 | 3300270 | 240.67                        | 267.07                        | 181.07                     | 193.23                     | 401.77          | 2               | 810             | Pork            |
| Buto bodo bodo    | 2016 | Gran Canaria | Valverde | 466321 | 3300270 | 0.0                           | 0.0                           | 0.0                        | 0.0                        | 0.0             | 0               | 810             | Pork            |
| Buto bodo bodo    | 2018 | Gran Canaria | Arucas | 456882 | 300092 | 313.87                        | 111.53                        | 127.7                      | 1                      | 622             | 1               | 919             | Goat/Sheep      |
| Buto bodo bodo    | 2018 | La Palma | Mayo | 228358 | 392069 | 22.70                         | 24.19                         | 0.0                        | 0.0                        | 22.8             | 1               | 919             | Goat/Sheep      |
| Buto bodo bodo    | 2018 | La Palma | Mayo | 228256 | 392049 | 159.02                        | 126.48                        | 0.0                        | 0.0                        | 22.8             | 1               | 919             | Goat/Sheep      |
| Buto bodo bodo    | 2020 | Gran Canaria | Gáldar | 457673 | 3300875 | 114.89                        | 185.09                        | 3.46                      | 2.94                        | 520.64          | 2               | 340             | Pork            |
| Buto bodo bodo    | 2019 | Gran Canaria | Gáldar | 454550 | 3300417 | 2.91                          | 2.19                          | 1.62                        | 1.38                        | 4.1              | 2               | 1050            | Pork            |
| Buto bodo bodo    | 2014 | Gran Canaria | Gáldar | 638818 | 3300502 | 0.0                           | 0.0                           | 0.0                        | 0.0                        | 515.53          | 3               | 1279            | Goat/Sheep      |
| Buto bodo bodo    | 2020 | Gran Canaria | San Mateo | 444595 | 3080798 | 26.06                         | 22.84                         | 18.68                     | 16.76                     | 7.94             | 4               | 76              | Pork            |
| Buto bodo bodo    | 2017 | La Palma | El Socorro | 362492 | 3916442 | 332.00                        | 361.88                        | 31.51                     | 15.66                     | 155.53          | 3               | 1279            | Goat/Sheep      |
| Buto bodo bodo    | 2018 | La Palma | El Socorro | 358034 | 3916799 | 16.69                         | 13.27                         | 312.85                    | 111.25                    | 130.18          | 2               | 1130            | Pork            |
| Buto bodo bodo    | 2019 | Gran Canaria | Gáldar | 457380 | 3300726 | 18.64                         | 13.44                         | 8.58                      | 7.24                        | 29.13           | 3               | 3663            | Cattle          |
| Buto bodo bodo    | 2019 | Gran Canaria | Gáldar | 456449 | 3000503 | 25.54                         | 21.56                         | 0.0                        | 0.0                        | 0.0              | 0               | 3688            | Goat/Sheep      |
| Buto bodo bodo    | 2018 | La Palma | El Tejaje | 326005 | 3117290 | 6.23                          | 4.49                          | 16.94                     | 14.44                     | 8.58             | 7.24                        | 29.13           | 3               | 3663            | Cattle          |
| Buto bodo bodo    | 2013 | Gran Canaria | Tijarafe | 459904 | 3000542 | 17.55                         | 15.77                         | 20.77                     | 18.47                     | 48.79            | 2               | 1668            | Pork            |
| Buto bodo bodo    | 2011 | Gran Canaria | Gáldar | 458304 | 3000452 | 23.58                         | 39.02                         | 0.0                        | 0.0                        | 0.0              | 0               | 1668            | Pork            |
| Buto bodo bodo    | 2017 | La Palma | El Socorro | 357789 | 3916000 | 26.70                         | 11.30                         | 50.48                     | 58.60                     | 85              | 2               | 1668            | Pork            |
| Buto bodo bodo    | 2019 | Gran Canaria | San Roque | 444056 | 3086617 | 1.34                          | 4.56                          | 0.0                        | 0.0                        | 1.75             | 1               | 1063            | Pork            |
| Buto bodo bodo    | 2017 | Gran Canaria | San Mateo | 444425 | 3081440 | 12.03                         | 14.90                         | 110.33                    | 111.87                    | 155.1           | 2               | 765             | Cattle          |
| Buto bodo bodo    | 2017 | Gran Canaria | San Mateo | 444425 | 3081440 | 9.87                          | 12.43                         | 6.55                      | 16.67                     | 28.53           | 3               | 126             | Goat/Sheep      |
| Buto bodo bodo    | 2014 | Gran Canaria | Arucas | 467168 | 3111519 | 56.03                         | 68.89                         | 40.43                     | 25.01                     | 21.34           | 3               | 866             | Goat/Sheep      |
| Buto bodo bodo    | 2014 | Gran Canaria | Arucas | 467168 | 3111519 | 0.0                           | 0.0                           | 0.0                        | 0.0                        | 0.0              | 0               | 866             | Goat/Sheep      |

(continued on next page)
Table 1 (continued)

| RAPTOR SPECIES | YEAR | ISLAND | MUNICIPALITY | UTMX | UTMN | BROMETHYLIN measurement 1 | BROMETHYLIN measurement 2 | BROMETHYLIN measurement 1 | BROMETHYLIN measurement 2 | DIFETHIALONE measurement 1 | DIFETHIALONE measurement 2 | FLUCOUMAFEN measurement 1 | FLUCOUMAFEN measurement 2 | ANIMAL IDENTIF. | Distance to the nearest farm (m) | Type of livestock |
|----------------|------|--------|--------------|------|------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|----------------|---------------------------------|------------------|
| Buteo buteo    |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |
| insularum      |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |
| 2011           |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |
| 2012           |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |
| 2013           |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |
| 2014           |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |
| 2015           |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |
| 2016           |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |
| 2017           |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |
| 2018           |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |
| 2019           |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |
| 2020           |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |
| 2021           |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |
| 2022           |      |        |              |      |      |                           |                          |                           |                          |                          |                          |                           |                          | Buteo buteo   |                                | Pork             |

(continued on next page)
| BAKTOR SPECIES | YEAR | ISLAND | MUNICIPALITY | UTMX | UTMY | SUM OF RODENTICIDES (using averaged
| | | | | | nearest farm (m)) |
|-----------------|------|--------|-------------|------|------|----------------------------------|
| Falco peregrinus pelegrinoides | 2020 | Gran Canaria | Artenara | 448978 | 320478 | 1.30 1.30 |
| Falco peregrinus pelegrinoides | 2019 | Lanzarote | Teguise | 634517 | 321588 | 5.80 6.80 |
| Falco peregrinus pelegrinoides | 2019 | Gran Canaria | Telde | 462585 | 308730 | 7.27 8.13 6.3 7.70 |
| Falco peregrinus pelegrinoides | 2019 | Gran Canaria | Telde | 462585 | 308730 | 0 0 1420 0 |
| Falco peregrinus pelegrinoides | 2018 | Tenerife | Arico | 352826 | 315796 | 3.54 4.16 5.17 5.80 6.80 |
| Falco peregrinus pelegrinoides | 2018 | Lanzarote | Teguise | 634517 | 321588 | 5.80 6.80 33.37 33.37 |
| Falco peregrinus pelegrinoides | 2018 | Lanzarote | Telde | 462585 | 308730 | 0 0 1420 0 |
| Falco peregrinus pelegrinoides | 2018 | Gran Canaria | Teguise | 640224 | 3215519 | 6.33 4.97 5.65 6816 |
| Falco peregrinus pelegrinoides | 2018 | Gran Canaria | Arico | 352826 | 315796 | 3.54 4.16 5.17 5.80 6.80 |
| Falco peregrinus pelegrinoides | 2018 | Lanzarote | Teguise | 640224 | 3215519 | 6.33 4.97 5.65 6816 |
| Falco peregrinus pelegrinoides | 2018 | Gran Canaria | Mogan | 437655 | 3088876 | 0 0 6213 0 |
| Falco peregrinus pelegrinoides | 2018 | Gran Canaria | Mogan | 437655 | 3088876 | 0 0 6213 0 |
| Falco peregrinus pelegrinoides | 2018 | Lanzarote | El Grifo | 616073 | 3180976 | 0 0 10343 0 |
| Falco peregrinus pelegrinoides | 2018 | Fuerteventura | La Oliva | 568210 | 3105010 | 0 0 20240 0 |
| Falco peregrinus pelegrinoides | 2018 | Fuerteventura | La Oliva | 568210 | 3105010 | 0 0 20240 0 |
| Falco subbuteo | 2019 | Fuerteventura | San Bartolomé de Tirajana | 454500 | 3301899 | 70.79 70.79 10.27 21.73 |
| Falco tinnunculus canariensis | 2020 | Fuerteventura | San Bartolomé de Tirajana | 440196 | 3087188 | 6.40 6.40 10.37 28.43 30.64 32.66 |
| Falco tinnunculus canariensis | 2020 | Fuerteventura | San Bartolomé de Tirajana | 440196 | 3087188 | 6.40 6.40 10.37 28.43 30.64 32.66 |
| Falco tinnunculus canariensis | 2020 | Gran Canaria | Ingenio | 468436 | 3088554 | 14.08 14.08 11.07 4.60 3.62 25.04 27.24 |

(continued on next page)
Table 1 (continued)

| RAPTOR SPECIES | YEAR | ISLAND | MUNICIPALITY         | UTMX | UTMY | BROMADIOLONE measurement 1 | BROMADIOLONE measurement 2 | BROMADIOLONE measurement 3 | DIETHANOLME measurement 1 | DIETHANOLME measurement 2 | DIETHANOLME measurement 3 | FLUCCOBAZIN measurement 1 | FLUCCOBAZIN measurement 2 | FLUCCOBAZIN measurement 3 | AAS OF INGESTION | NO RODENTS/DEAD | Distance to the nearest farm (m) | TYPE OF INGESTION |
|-----------------|------|--------|----------------------|------|------|----------------------------|----------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------|----------------|------------------------------------------------|-----------------|
| Falco amurensis  | 2020 | Gà › | Table               | 46070 | 3087607 | 26.05                        | 28.06                       | 30.46                       | 31.81                       | 1.56                       | 1.66                       | 0.50                       | 0.42                       | 0.53                       | 4                    | 495            | 0                                              | Goat/Sheep        |
| Falco amurensis  | 2014 | La Palma | Los Llanos de Andia   | 530546   | 3175002 | 163.56                       | 128.52                       | 495.50                       | 357.36                       | 32.08                       | 14.77                       | 365.77                     | 2                           | 492                       | 2                    | 572            | 0                                              | Pork             |
| Falco amurensis  | 2014 | Gà › | Santa Maria de Gâ › | 670007   | 3307065   | 97.52                       | 76.62                       | 500.86                       | 477.20                       | 2                           | 492                       | 2                           | 572                       | 2                    | 585            | 2                                              | Pork             |
| Falco amurensis  | 2008 | La Gomera | San Sebastián de la Gomera | 2835313 | 3809549   | 48.05                       | 37.75                       | 3.46                         | 3.74                        | 1.54                       | 1.54                       | 305                       | 2                           | 572                       | 2                    | 585            | 2                                              | Goat/Sheep        |
| Falco amurensis  | 2004 | La Palma | El Pino               | 224440   | 320717    | 0                           | 0                           | 0                           | 0                           | 0                           | 0                           | 0                           | 0                           | 0                    | 572            | 0                                              | Goat/Sheep        |
| Falco amurensis  | 2004 | La Palma | El Pino               | 224440   | 360717    | 28.03                       | 35.89                       | 1853.65                      | 1076.35                      | 1076.61                     | 1076.61                     | 1076.61                     | 572                       | 2                    | 572            | 2                                              | Goat/Sheep        |
| Falco amurensis  | 2004 | Gà › | Valvercio             | 663413   | 3902482   | 47.06                       | 58.32                       | 3                           | 12                         | 51.81                       | 8.65                       | 7.37                       | 365.53                     | 4                    | 774            | 695                                            | Cattle           |
| Falco amurensis  | 2020 | Gà › | Tetuana               | 444550   | 3002807   | 30.37                       | 37.67                       | 4.52                         | 5.22                       | 60.53                       | 51.81                       | 8.65                       | 365.53                     | 4                    | 774            | 695                                            | Cattle           |
| Falco amurensis  | 2020 | Gà › | San Remigial de Tejajaa | 448717   | 3072015   | 22.70                       | 28.31                       | 20.06                       | 27.60                       | 1.94                       | 1.66                       | 2.59                       | 2.21                       | 565                       | 4                    | 820            | 820                                            | Goat/Sheep        |
| Falco amurensis  | 2020 | Gà › | Ingenia               | 454956   | 4797      | 58.83                       | 54.65                       | 57.47                       | 11.54                       | 9.66                       | 1002                       | 3                           | 820                       | 3                    | 820            | 820                                            | Goat/Sheep        |
| Falco amurensis  | 2009 | La Gomera | Hermigua             | 274774   | 3107470   | 34.74                       | 35.66                       | 3                           | 12                          | 95.2                       | 1                           | 894                       | 2                           | 899                       | 2                    | 899            | 2                                              | Pork             |
| Falco amurensis  | 2007 | La Gomera | Alajalí               | 273972   | 3009537   | 605.28                      | 754.80                       | 50.44                       | 51.95                       | 722                       | 2                           | 899                       | 2                           | 899                       | 2                    | 899            | 2                                              | Pork             |
| Falco amurensis  | 2020 | Gà › | San Remigial de Tejajaa | 446416   | 3075216   | 5.74                        | 7.16                        | 1.12                        | 1.19                        | 1.01                       | 2.01                       | 2.47                       | 31.59                      | 4                           | 811                       | 3                    | 811            | 3                                              | Pork             |
| Falco amurensis  | 2009 | Gà › | Los Palacios de Gran Canaria | 457749   | 3500363   | 62.05                       | 77.17                       | 4.06                         | 4.94                       | 36.5                       | 2                           | 820                       | 3                           | 820                       | 3                    | 820            | 3                                              | Cattle           |
| Falco amurensis  | 2009 | Gà › | Ayacan                | 467582   | 3124455   | 38.72                       | 48.29                       | 43.46                       | 46.14                       | 12.10                       | 10.36                       | 89.5                       | 3                           | 820                       | 3                    | 820            | 3                                              | Goat/Sheep        |
| Falco amurensis  | 2009 | Gà › | Santa Lucia de Tejajaa | 454584   | 3088305   | 15.31                       | 19.06                       | 18.33                       | 19.47                       | 1.51                       | 1.28                       | 37.5                       | 3                           | 650                       | 3                    | 650            | 3                                              | Cattle           |

(continued on next page)
Table 1 (continued)

| RAPTOR SPECIES | YEAR | ISLAND | MUNICIPALITY | UTMX | UTMY | BRIDACOUM measurement 1 | BRIDACOUM measurement 2 | BROMADIOLONE measurement 1 | BROMADIOLONE measurement 2 | DIFENACOUM measurement 1 | DIFENACOUM measurement 2 | DIFETHIALONE measurement 1 | DIFETHIALONE measurement 2 | ELUCOMAFEN measurement 1 | ELUCOMAFEN measurement 2 | being averaged measurements | % REDUCTION | Distance to the nearest farm (m) | Type of livestock |
|----------------|------|--------|--------------|------|------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Falco tinnunculus canariensis | 2020 | Gran Canaria | San Bartolomé de Tirajana | 445443 | 3073136 | 1.25 | 1.55 | 7.84 | 0.78 | 0.52 | 0.44 | 0.54 | 0.58 | 11.25 | 4 | 1023 | Cattle |
| Falco tinnunculus canariensis | 2020 | Gran Canaria | San Bartolomé de Tirajana | 445025 | 3073258 | 0.78 | 1.08 | 3.37 | 0.37 | 0.28 | 0.25 | 0.28 | 0.31 | 0.34 | 1.30 | 3 | 1120 | Goat/Sheep |
| Falco tinnunculus canariensis | 2014 | La Palma | Los Cancajos de Arrieta | 255317 | 3605875 | 3.83 | 4.81 | 22.86 | 2.66 | 2.54 | 2.61 | 2.54 | 2.61 | 2.66 | 8.00 | 1 | 1123 | Goat/Sheep |
| Falco tinnunculus canariensis | 2014 | La Palma | El Paso | 250897 | 3172371 | 0.44 | 0.54 | 0.52 | 0.58 | 0.44 | 0.58 | 0.52 | 0.58 | 1.12 | 4 | 1023 | Cattle |
| Falco tinnunculus canariensis | 2014 | La Palma | El Paso | 224146 | 3362598 | 4.08 | 4.68 | 8.13 | 8.13 | 4.84 | 4.84 | 4.84 | 4.84 | 8.13 | 4 | 1023 | Cattle |
| Falco tinnunculus canariensis | 2020 | Gran Canaria | Arrecife | 447251 | 3002646 | 56.37 | 66.17 | 3.05 | 4.81 | 0.46 | 0.46 | 0.46 | 0.46 | 66.31 | 3 | 1120 | Cattle |
| Falco tinnunculus canariensis | 2014 | Gran Canaria | Tenerife | 463960 | 3002987 | 818.42 | 960.76 | 219.49 | 273.75 | 219.49 | 273.75 | 219.49 | 273.75 | 3756.21 | 2 | 1120 | Goat/Sheep |
| Falco tinnunculus canariensis | 2017 | Tenerife | Los Realejos | 343478 | 3142281 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1120 | Pork |
| Falco tinnunculus canariensis | 2017 | Tenerife | Tacoronte | 382703 | 3149625 | 0.64 | 0.76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1120 | Cattle |
| Falco tinnunculus canariensis | 2018 | Tenerife | La Orotava | 351840 | 3140064 | 1.28 | 1.51 | 1.57 | 1.57 | 1.57 | 1.57 | 1.57 | 1.57 | 3.14 | 2 | 1120 | Pork |
| Falco tinnunculus canariensis | 2015 | Gran Canaria | Las Palmas de Gran Canaria | 452295 | 3118007 | 7.41 | 8.13 | 328.54 | 489.26 | 328.54 | 489.26 | 328.54 | 489.26 | 489.26 | 2 | 1120 | Goat/Sheep |
| Falco tinnunculus canariensis | 2018 | Tenerife | Los Cancajos de Arrieta | 332042 | 3106827 | 1.52 | 3.12 | 4.14 | 5.60 | 4.14 | 5.60 | 4.14 | 5.60 | 8.60 | 2 | 1120 | Cattle |
| Falco tinnunculus canariensis | 2016 | Gran Canaria | Santa Brígida | 453400 | 3003429 | 1076.09 | 1381.47 | 378.40 | 212.63 | 378.40 | 212.63 | 378.40 | 212.63 | 581.14 | 2 | 1120 | Goat/Sheep |
| Falco tinnunculus canariensis | 2016 | Gran Canaria | Santa Brígida | 453476 | 3003516 | 900.35 | 1017.27 | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 1 | 1120 | Goat/Sheep |

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| RAPTOR SPECIES | YEAR | ISLAND | MUNICIPALITY       | UTMX | UTMY | BRODIFACOUM measurement 1 | BRODIFACOUM measurement 2 | BROMETHADione measurement 1 | BROMETHADione measurement 2 | DIXETHIALONE measurement 1 | DIXETHIALONE measurement 2 | FLUCLOPHAEN measurement 1 | FLUCLOPHAEN measurement 2 | NO. IDENTIDIES | Distance to the nearest farm (m) | Type of livestock |
|----------------|------|--------|-------------------|------|------|---------------------------|---------------------------|-----------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|-------------------------|----------------|-----------------------------|------------------|
| Falco tinnunculus conicus | 2007 | La Gomera | Agaete            | 370604 | 316677 | 41.40                     | 48.63                     | 64.01                        | 68.61                        | -                          | 68.08                       | -                       | 502          | 2                           | 1176             | Pork                       |
| Falco tinnunculus conicus | 2014 | La Palma | Sanlucar          | 232024 | 3177308 | 11.01                      | 14.01                      | 70.04                        | 81.04                        | -                          | 70.04                       | -                       | 81.76        | 2                           | 1372             | Goat/Sheep                 |
| Falco tinnunculus conicus | 2018 | Tenerife | El Tanque        | 325941 | 3136087 | 9.90                       | 11.62                      | 108.61                       | 117.39                       | -4.41                      | 4.09                        | -                       | 802.61       | 3                           | 1784             | Cattle                     |
| Falco tinnunculus conicus | 2018 | Tenerife | El Recife        | 325271 | 3136235 | 2.75                       | 3.10                       | 12.43                        | 13.47                        | -                         | -                           | -                       | 35.0         | 2                           | 1816             | Cattle                     |
| Falco tinnunculus conicus | 2018 | Gáldar   | Agaete           | 434493 | 3303475 | 0                          | 0                         | 0                            | 0                           | -                          | -                           | -                       | 0            | 0                           | 0                | Goat/Sheep                 |
| Falco tinnunculus conicus | 2014 | Gáldar   | Tijara           | 458246 | 3087315 | 11.02                      | 14.00                      | 201.54                       | 250.05                       | 25.00                      | 25.36                       | -                       | 1303.87      | 3                           | 3666             | Goat/Sheep                 |
| Falco tinnunculus conicus | 2016 | Gáldar   | Galatán          | 438134 | 3303439 | 37.94                      | 48.46                      | -                            | -                           | -                          | -                           | -                       | 38.9         | 1                           | 2167             | Cattle                     |
| Falco tinnunculus conicus | 2007 | Tenerife | Guía de Isora   | 324346 | 3120558 | 940.00                     | 660.00                     | 27.84                        | 38.16                        | -                          | -                           | -                       | 770          | 2                           | 2322             | Goat/Sheep                 |
| Falco tinnunculus conicus | 2007 | Tenerife | Guía de Isora   | 324346 | 3120558 | 403.20                     | 336.80                     | 352.80                       | 357.20                       | -                          | -                           | -                       | 540          | 2                           | 2322             | Goat/Sheep                 |
| Falco tinnunculus conicus | 2018 | La Gomera | San Sebastián de la Gomera | 283452 | 3191017 | 501.76                      | 630.24                      | -                            | -                           | -                          | -                           | -                       | 686          | 1                           | 2800             | Pork                       |
| Falco tinnunculus conicus | 2007 | Tenerife | Santiago del Teide | 335264 | 3524071 | 0                          | 0                         | 0                            | 0                           | -                          | -                           | -                       | 0            | 0                           | 1200             | Goat/Sheep                 |
| Falco tinnunculus conicus | 2016 | Gáldar   | Las Palmas de Gran Canario | 458480 | 3504557 | 1.75                       | 2.52                       | 2.27                        | 2.72                        | -                          | -                           | -                       | 5.95         | 2                           | 3691             | Pork                       |
| Falco tinnunculus conicus | 2016 | Gáldar   | Las Palmas de Gran Canario | 458481 | 3504557 | 0                          | 0                         | 0                            | 0                           | -                          | -                           | -                       | 0            | 0                           | 3691             | Pork                       |
| Falco tinnunculus conicus | 2016 | Gáldar   | Las Palmas de Gran Canario | 458480 | 3504557 | 0                          | 0                         | 0                            | 0                           | -                          | -                           | -                       | 0            | 0                           | 3691             | Pork                       |
| Falco tinnunculus conicus | 2016 | Gáldar   | Las Palmas de Gran Canario | 458480 | 3504557 | 0                          | 0                         | 0                            | 0                           | -                          | -                           | -                       | 0            | 0                           | 3691             | Pork                       |
| Falco tinnunculus conicus | 2016 | Gáldar   | Las Palmas de Gran Canario | 458480 | 3504557 | 0                          | 0                         | 0                            | 0                           | -                          | -                           | -                       | 0            | 0                           | 3691             | Pork                       |

(continued on next page)
Table 1 (continued)

| RAPTOR SPECIES | YEAR | ISLAND | MUNICIPALITY | UTMX | UTMY | SUM OF RODENTICIDES (using averaged measurements) | % REDENTICIDES | Distance to the nearest farm (m) | Type of livestock |
|----------------|------|--------|--------------|------|------|-----------------------------------------------|----------------|-------------------------------|------------------|
| Falco tinnunculus canariensis | 2018 | Tenerife | El Tanque | 323900 | 313622 | 0 | 0 | 3685 | Cattle |
| Falco tinnunculus canariensis | 2020 | La Palma | Mazo | 323705 | 317794 | 0 | 0 | 3965 | Cattle |
| Falco tinnunculus canariensis | 2017 | Tenerife | El Tanque | 323246 | 312751 | 0 | 0 | 3965 | Cattle |
| Falco tinnunculus canariensis | 2017 | Tenerife | Santa Cruz de Tenerife | 323246 | 312751 | 0 | 0 | 3965 | Cattle |
| Falco tinnunculus canariensis | 2017 | Tenerife | El Tanque | 324514 | 313485 | 0 | 0 | 5070 | Cattle |
| Falco tinnunculus canariensis | 2017 | Tenerife | El Tanque | 324448 | 313474 | 0 | 0 | 5100 | Cattle |
| Falco tinnunculus canariensis | 2014 | Gran Canaria | San Mateo | 444338 | 308542 | 0 | 0 | 6415 | Goat/Sheep |
| Falco tinnunculus canariensis | 2020 | Gran Canaria | San Bartolomé de Tirajana | 460284 | 304550 | 0 | 0 | 5415 | Goat/Sheep |
| Falco tinnunculus canariensis | 2018 | Gran Canaria | Buenavista del Norte | 320572 | 312017 | 0 | 0 | 6160 | Goat/Sheep |
| Falco tinnunculus canariensis | 2017 | La Gomera | Hermigua | 284955 | 311768 | 0 | 0 | 6200 | Goat/Sheep |
| Falco tinnunculus canariensis | 2017 | Tenerife | El Tanque | 323743 | 313485 | 0 | 0 | 6210 | Pork |
| Falco tinnunculus canariensis | 2018 | Tenerife | Vilaflor | 338727 | 311520 | 0 | 0 | 6470 | Cattle |
| Falco tinnunculus canariensis | 2018 | La Gomera | Alajeró | 282492 | 310255 | 0 | 0 | 6500 | Pork |
| Falco tinnunculus canariensis | 2018 | Tenerife | Santiago del Teide | 325506 | 313054 | 0 | 0 | 7460 | Cattle |
| RAPTOR SPECIES | YEAR | ISLAND | MUNICIPALITY | UTMX | UTMY | SUM OF RODENTICIDES | RAPTOR BRODIFACOUM | BRODIFACOUM measurement 2 | RAPTOR BROMADIOLONE | BROMADIOLONE measurement 2 | RAPTOR DIFENACOUM | DIFENACOUM measurement 2 | RAPTOR DIFETHIALONE | DIFETHIALONE measurement 2 | RAPTOR FLOCOUMAFEN | FLOCOUMAFEN measurement 2 | Measurement N° | Distance to the nearest farm (m) | Type of livestock |
|----------------|------|---------|--------------|------|------|----------------------|--------------------|------------------------|---------------------|---------------------|----------------|--------------------|----------------|------------------------|----------------|--------------------------|-----------------|
| Falco tinnunculus dacotiae | 2017 | Tenerife | Santa Cruz de Tenerife | 378638 | 3558873 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80177 | 0 | Park |
| Falco tinnunculus dacotiae | 2017 | Tenerife | Santa Cruz de Tenerife | 378675 | 3558830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80177 | 0 | Park |
| Falco tinnunculus dacotiae | 2019 | Fuerteventura | Antigua | 599626 | 3390592 | 24.03 | 10.97 | 31.54 | 24.96 | 2.94 | 2.14 | 2.14 | 2.14 | 2.14 | 593 | 3 | 497 | Park |
| Falco tinnunculus dacotiae | 2019 | Lanzarote | Haría | 634800 | 3230518 | 109.10 | 237.10 | 40.40 | 42.14 | 25.14 | 2 | 125 | Park |
| Falco tinnunculus dacotiae | 2016 | Lanzarote | Teguise | 629815 | 3236904 | 23.62 | 61.56 | 67.24 | 67.24 | 1493 | 1 | 369 | Park |
| Falco tinnunculus dacotiae | 2019 | Fuerteventura | La Oliva | 668201 | 3172836 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2112 | Goat/Sheep |
| Falco tinnunculus dacotiae | 2020 | Fuerteventura | La Oliva | 594156 | 3362277 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2378 | Pork |
| Falco tinnunculus dacotiae | 2020 | Fuerteventura | Puerto del Rosario | 694762 | 3153057 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3154 | Pork |
| Falco tinnunculus dacotiae | 2019 | Fuerteventura | Puerto del Rosario | 686639 | 3152448 | 38.63 | 3.68 | 31.4 | 40.51 | 5.08 | 42.71 | 3 | 4084 | Pork |
| Falco tinnunculus dacotiae | 2019 | Lanzarote | Teguise | 624294 | 3212311 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4236 | Pork |
| Falco tinnunculus dacotiae | 2019 | Lanzarote | Teguise | 653070 | 3288223 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4480 | Pork |
| Falco tinnunculus dacotiae | 2019 | Lanzarote | Teguise | 648593 | 3236564 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5417 | Pork |
| Falco tinnunculus dacotiae | 2020 | La Gomera | Herguas | 287795 | 3141162 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5780 | Goat/Sheep |
| Falco tinnunculus dacotiae | 2017 | Fuerteventura | Fajana | 583826 | 3137560 | 11.19 | 13.98 | 3.19 | 13.15 | 107 | 107 | 107 | 107 | 107 | 5105 | 3 | 8000 | Goat/Sheep |
| Falco tinnunculus dacotiae | 2020 | Fuerteventura | Fajana | 567033 | 3306609 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1871 | Goat/Sheep |
| Falco tinnunculus dacotiae | 2014 | Fuerteventura | Fajana | 583064 | 3137545 | 9.02 | 12.39 | 9.02 | 12.39 | 3116 | 1 | 6275 | Goat/Sheep |

(continued on next page)
| RAPTOR SPECIES | YEAR | ISLAND | MUNICIPALITY | UTMX | UTMY | SUM OF RODENTICIDES | BRODIFACOUM measurement 1 | BRODIFACOUM measurement 2 | DIFETHIALONE measurement 1 | DIFETHIALONE measurement 2 | BROMADIOLONE measurement 1 | BROMADIOLONE measurement 2 | DIETHANOLME measurement 1 | DIETHANOLME measurement 2 | FLOCOUMAFEN measurement 1 | FLOCOUMAFEN measurement 2 | SUM OF RODENTICIDES (using averaged measurements) | % RODENTKILLER | Distance to the nearest farm (m) | Type of livestock |
|----------------|------|--------|--------------|------|------|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------------------|------------------|-----------------------------|------------------|
| Neophron percnopterus majorensis | 2018 | Lanzarote | Yaiza | 6138197 | 3288465 | 0 | 0 | 1606 | Pork |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Tuire | 584547 | 3123326 | 124.57 | 146.23 | 11.06 | 13.80 | 147.83 | 2 | 204 | Pork |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Tuire | 584547 | 3123326 | 25.00 | 25.00 | 79.66 | 79.55 | 100.38 | 2 | 455 | Pork |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Tuire | 584547 | 3123326 | 74.45 | 74.45 | 5.02 | 6.28 | 30.48 | 2 | 542 | Pork |
| Neophron percnopterus majorensis | 2017 | Fuerteventura | Betancuria | 604823 | 3166247 | 21.30 | 25.00 | 11.06 | 13.80 | 147.83 | 2 | 204 |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Puerto del Rosario | 687315 | 3050605 | 36.52 | 42.88 | 30.48 | 31.57 | 1125 | Pork |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Puerto del Rosario | 687315 | 3050605 | 1257 | 1125 | 31.57 | 31.57 | 1125 | Pork |
| Neophron percnopterus majorensis | 2015 | Fuerteventura | La Oliva | 604823 | 3365247 | 0 | 0 | 1257 | Goat/Sheep |
| Neophron percnopterus majorensis | 2015 | Fuerteventura | La Oliva | 604823 | 3365247 | 30.77 | 36.13 | 36.13 | 36.13 | 62.35 | 2 | 1257 | Goat/Sheep |
| Neophron percnopterus majorensis | 2015 | Fuerteventura | La Oliva | 604823 | 3365247 | 41.97 | 44.57 | 41.97 | 44.57 | 62.35 | 2 | 1257 | Goat/Sheep |
| Neophron percnopterus majorensis | 2015 | Fuerteventura | La Oliva | 604823 | 3365247 | 70.42 | 82.66 | 18.79 | 23.43 | 97.65 | 2 | 1257 | Goat/Sheep |
| Neophron percnopterus majorensis | 2019 | Fuerteventura | Flamar | 687508 | 3150670 | 13.34 | 15.66 | 2.72 | 2.88 | 17.3 | 2 | 1204 | Pork |

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| BAPTUE SPECIES | YEAR | ISLAND | MUNICIPALITY | UTMX | UTMY | DIFENACOUM measurement 1 | DIFENACOUM measurement 2 | DIFENACOUM measurement 3 | DIFENACOUM measurement 4 | DIFENACOUM measurement 5 | DIFENACOUM measurement 6 | DIFENACOUM measurement 7 | DIFENACOUM measurement 8 | DIFENACOUM measurement 9 | DIFENACOUM measurement 10 | MEASUREMENT (m) | NO. IDENTIFIED | DISTANCE TO THEertest able line (m) |
|---------------|------|--------|--------------|------|------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------|---------------------------|
| Neophron percnopterus majorensis | 2017 | Fuerteventura | Antigua | 588896 | 3145771 | 162.38 | 180.26 | 775.5 | 1.0 | 0.120 | Pork |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Puerto del Rosario | 586836 | 3142556 | 36.08 | 45.77 | 1434 | 2.0 | 0.157 | Goat/Sheep |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Puerto del Rosario | 586836 | 3142556 | 36.08 | 45.77 | 1434 | 2.0 | 0.157 | Goat/Sheep |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Antigua | 605541 | 3130798 | 11.77 | 14.69 | 86.06 | 1.0 | 8.0 | Pork |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Puerto del Rosario | 604312 | 3150277 | 28.58 | 35.45 | 14.69 | 2.0 | 0.154 | Pork |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Puerto del Rosario | 613728 | 3155801 | 11.77 | 14.69 | 86.06 | 1.0 | 8.0 | Pork |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Puerto del Rosario | 613728 | 3155801 | 11.77 | 14.69 | 86.06 | 1.0 | 8.0 | Pork |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Puerto del Rosario | 688203 | 3160005 | 8.28 | 10.32 | 89.91 | 1.0 | 8.0 | Pork |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Puerto del Rosario | 586734 | 3151654 | 11.77 | 14.69 | 86.06 | 1.0 | 8.0 | Pork |
| Neophron percnopterus majorensis | 2017 | Fuerteventura | Stauge | 586478 | 3134487 | 11.77 | 14.69 | 86.06 | 1.0 | 8.0 | Goat/Sheep |
| Neophron percnopterus majorensis | 2017 | Fuerteventura | Stauge | 587075 | 3127987 | 11.77 | 14.69 | 86.06 | 1.0 | 8.0 | Goat/Sheep |
| Neophron percnopterus majorensis | 2018 | Fuerteventura | Puerto del Rosario | 684387 | 3150975 | 86.06 | 107.34 | 86.06 | 1.0 | 8.0 | Pork |
| Neophron percnopterus majorensis | 2018 | Fuerteventura | Puerto del Rosario | 686823 | 3150578 | 86.06 | 107.34 | 86.06 | 1.0 | 8.0 | Goat/Sheep |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | La Oliva | 612967 | 3167935 | 86.06 | 107.34 | 86.06 | 1.0 | 8.0 | Goat/Sheep |
| Neophron percnopterus majorensis | 2012 | Fuerteventura | La Oliva | 604976 | 3171558 | 86.06 | 107.34 | 86.06 | 1.0 | 8.0 | Goat/Sheep |
| RAPTOR SPECIES | YEAR | ISLAND | MUNICIPALITY | UTMX | UTMY | BROMADIOCLOCUR measurement 1 | BROMADIOCLOCUR measurement 2 | DIFENACOUM measurement 1 | DIFENACOUM measurement 2 | DIFETHYLALONE measurement 1 | DIFETHYLALONE measurement 2 | EUCOMYXEN measurement 1 | EUCOMYXEN measurement 2 | AREA of Infestation (in the same form [m²] | DISTANCE TO THE NEAREST FORM (m) | Type of livestock |
|----------------|------|--------|--------------|------|------|-------------------------------|-------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|----------------------------|--------------------------|
| Neophron percnopterus majorensis | 2015 | Fuerteventura | La Oliva | 6044823 | 3166247 | 0 | 0 | 3767 | Goat/Sheep |
| Neophron percnopterus majorensis | 2015 | Fuerteventura | La Oliva | 6044823 | 3166247 | 0 | 0 | 3767 | Goat/Sheep |
| Neophron percnopterus majorensis | 2015 | Fuerteventura | La Oliva | 6044823 | 3166247 | 0 | 0 | 3767 | Goat/Sheep |
| Neophron percnopterus majorensis | 2015 | Fuerteventura | La Oliva | 6044823 | 3166247 | 0 | 0 | 3767 | Goat/Sheep |
| Neophron percnopterus majorensis | 2015 | Fuerteventura | Puebla del Rosario | 607085 | 3144075 | 0 | 0 | 4220 | Goat/Sheep |
| Neophron percnopterus majorensis | 2015 | Fuerteventura | Puerto del Rosario | 610889 | 3160520 | 0 | 0 | 4220 | Pork |
| Neophron percnopterus majorensis | 2015 | Fuerteventura | La Oliva | 613994 | 3160859 | 0 | 0 | 4222 | Goat/Sheep |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | La Oliva | 584098 | 3160201 | 0 | 0 | 5117 | Goat/Sheep |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Puerto del Rosario | 606414 | 3164261 | 0 | 0 | 5111 | Pork |
| Neophron percnopterus majorensis | 2016 | Fuerteventura | Tangue | 583953 | 3149264 | 0 | 0 | 5408 | Goat/Sheep |
| Neophron percnopterus majorensis | 2017 | Fuerteventura | Antigua | 608264 | 3147377 | 0 | 0 | 5763 | Goat/Sheep |
| Neophron percnopterus majorensis | 2017 | Fuerteventura | Filipe | 587946 | 3154646 | 0 | 0 | 5380 | Goat/Sheep |
| Neophron percnopterus majorensis | 2018 | Lanzarote | Teguise | 645405 | 3218612 | 0 | 0 | 6823 | Goat/Sheep |
| Neophron percnopterus majorensis | 2017 | Fuerteventura | La Oliva | 588128 | 3160075 | 0 | 0 | 6214 | Pork |
| Neophron percnopterus majorensis | 2019 | Fuerteventura | La Oliva | 587071 | 3160483 | 0 | 0 | 621 | Goat/Sheep |
| Neophron percnopterus majorensis | 2017 | Fuerteventura | Puerto del Rosario | 605347 | 3154667 | 0 | 0 | 645 | Goat/Sheep |
| Neophron percnopterus majorensis | 2017 | Fuerteventura | Filipe | 585159 | 3149690 | 0 | 0 | 6380 | Goat/Sheep |
| Neophron percnopterus majorensis | 2019 | Fuerteventura | Puerto del Rosario | 604484 | 3150651 | 0 | 0 | 670 | Goat/Sheep |
| Neophron percnopterus majorensis | 2017 | Fuerteventura | Tangue | 606846 | 3157525 | 0 | 0 | 7125 | Goat/Sheep |
| Neophron percnopterus majorensis | 2017 | Fuerteventura | Filipe | 583630 | 3154667 | 0 | 0 | 7218 | Goat/Sheep |

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| MOTHER SPECIES | YEAR | ISLAND | MUNICIPALITY | UTMX | UTMN | BRODIFACOUM measurement 1 | BRODIFACOUM measurement 2 | DIFENACOUM measurement 1 | DIFENACOUM measurement 2 | DIFETHIALONE measurement 1 | DIFETHIALONE measurement 2 | DIFLUOUCAM measurement 1 | DIFLUOUCAM measurement 2 | MEAN (µg/g) | % IDESYSTES | Distance to the nearest farm (m) | Type of bird |
|----------------|------|--------|--------------|------|------|---------------------------|---------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|--------------------------|-------------|--------------|-----------------------------|-------------|
| Neophron percnopterus majorensis | 2018 | Fuerteventura | Pijaral | 591986 | 311750 | 0 | 0 | 7770 | Rock |
| Neophron percnopterus majorensis | 2015 | Fuerteventura | La Oliva | 484823 | 310387 | 0 | 0 | 7770 | Goat/Sheep |
| Neophron percnopterus majorensis | 2015 | Fuerteventura | La Oliva | 484823 | 310387 | 0 | 0 | 7770 | Goat/Sheep |
| Neophron percnopterus majorensis | 2020 | Fuerteventura | Pijaral | 960449 | 310590 | 0 | 0 | 8201 | Goat/Sheep |
| Neophron percnopterus majorensis | 2020 | Fuerteventura | Pijaral | 961300 | 310562 | 0 | 0 | 8201 | Goat/Sheep |
| Neophron percnopterus majorensis | 2020 | Fuerteventura | Pijaral | 960697 | 310810 | 0 | 0 | 8201 | Goat/Sheep |
| Neophron percnopterus majorensis | 2020 | Fuerteventura | Pijaral | 962180 | 310813 | 0 | 0 | 8201 | Goat/Sheep |
| Neophron percnopterus majorensis | 2020 | Fuerteventura | Pijaral | 961641 | 310810 | 0 | 0 | 8201 | Goat/Sheep |
| Neophron percnopterus majorensis | 2020 | Fuerteventura | Pijaral | 962037 | 310810 | 0 | 0 | 8201 | Goat/Sheep |
| Neophron percnopterus majorensis | 2001 | Fuerteventura | Tarijao | 500608 | 312440 | 12.28 | 0.19 | 20.29 | 2160 | 32.04 | 2 | 6240 | Rock |
| Neophron percnopterus majorensis | 2020 | Fuerteventura | Pijaral | 582556 | 31811 | 0 | 0 | 8544 | Goat/Sheep |
| Neophron percnopterus majorensis | 2020 | Fuerteventura | Puerto del Rosario | 491683 | 315678 | 0 | 0 | 9716 | Goat/Sheep |
| Neophron percnopterus majorensis | 2015 | Fuerteventura | Pijaral | 581745 | 317812 | 0 | 0 | 1670 | Goat/Sheep |
| Neophron percnopterus majorensis | 2007 | Fuerteventura | Pijaral | 592459 | 310836 | 0 | 0 | 20497 | Rock |
| Tyto alba | 2020 | Gran Canaria | Gáldar | 499046 | 310883 | 14.20 | 11.23 | 3.34 | 11.1 | 3.34 | 1.30 | 1722 | 3 | 81 | Rock |
| Tyto alba | 2019 | Gran Canaria | Gáldar | 487084 | 310878 | 5.69 | 4.40 | 1.54 | 1.66 | 1.38 | 1732 | 22.2 | 3 | 867 | Cattle |
| Tyto alba | 2019 | Gran Canaria | Gáldar | 482678 | 310777 | 1.36 | 0.06 | 10.5 | 13.3 | 1.36 | 0.06 | 1107 | 1 | 1904 | Rock |
| Tyto alba | 2020 | Gran Canaria | Santa Brígida | 489569 | 310964 | 0 | 0 | 1480 | Goat/Sheep |
| Tyto alba | 2019 | Gran Canaria | Las Palmas de Gran Canaria | 498283 | 310783 | 4.62 | 1.76 | 4.3 | 1 | 3235 | Goat/Sheep |
| Tyto alba | 2019 | Gran Canaria | Las Palmas de Gran Canaria | 498283 | 310783 | 4.62 | 1.76 | 4.3 | 1 | 3235 | Goat/Sheep |
| Tyto alba | 2011 | Lanzarote | Yaiza | 621968 | 310852 | 0.20 | 0.16 | 0.22 | 0.24 | 0.04 | 0.04 | 900 | 3 | 102 | Rock |
| Tyto alba | 2011 | Lanzarote | Yaiza | 612050 | 310810 | 0.20 | 0.16 | 0.22 | 0.24 | 0.04 | 0.04 | 900 | 3 | 102 | Rock |
| Tyto alba | 2010 | Lanzarote | Yaiza | 607965 | 310250 | 12.22 | 0.59 | 10.9 | 1 | 1400 | Rock |
| Tyto alba | 2011 | Lanzarote | Yaiza | 610010 | 310830 | 12.77 | 10.95 | 12.06 | 14.34 | 119 | 119 | 45.96 | 3 | 1403 | Rock |
Fig. 1. Map of the Island of Gran Canaria. The location of the cases of raptors positive to oral anticoagulants (red stars), the negative ones (white stars) and the cattle farms surrounded by a buffer zone of 1.5 km radius are shown. On the right, a box and whiskers graph shows the statistical comparison between the two groups of animals, found inside or outside the buffer zone of the farms. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)
Fig. 2. Map of the Island of Fuerteventura. The location of the cases of raptors positive to oral anticoagulants (red stars), the negative ones (white stars) and the cattle farms surrounded by a buffer zone of 1.5 km radius are shown. On the right, a box and whiskers graph shows the statistical comparison between the two groups of animals, found inside or outside the buffer zone of the farms. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)
Fig. 3. Map of the Islands of Lanzarote and La Graciosa. The location of the cases of raptors positive to oral anticoagulants (red stars), the negative ones (white stars) and the cattle farms surrounded by a buffer zone of 1.5 km radius are shown. On the right, a box and whiskers graph shows the statistical comparison between the two groups of animals, found inside or outside the buffer zone of the farms. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)
Fig. 4. Map of the Island of Tenerife. The location of the cases of raptors positive to oral anticoagulants (red stars), the negative ones (white stars) and the cattle farms surrounded by a buffer zone of 1.5 km radius are shown. On the right, a box and whiskers graph shows the statistical comparison between the two groups of animals, found inside or outside the buffer zone of the farms. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)
Fig. 5. Map of the Islands of La Palma and La Gomera. The location of the cases of raptors positive to oral anticoagulants (red stars), the negative ones (white stars) and the cattle farms surrounded by a buffer zone of 1.5 km radius are shown. On the right, a box and whiskers graph shows the statistical comparison between the two groups of animals, found inside or outside the buffer zone of the farms. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)
Fig. 6. Box and whiskers graph showing the statistical comparison between the two groups of common buzzards (Buteo buteo insularum), found inside or outside the buffer zone of the farms.
Fig. 7. Box and whiskers graph showing the statistical comparison between the two groups of common kestrels (*Falco tinnunculus canariensis* and *dacotiae*), found inside or outside the buffer zone of the farms.
Fig. 8. Box and whiskers graph showing the statistical comparison between the two groups of long-eared owls (*Asio otus canariensis*), found inside or outside the buffer zone of the farms.
Fig. 9. Box and whiskers graph showing the statistical comparison between the two groups of Egyptian vultures (*Neophron percnopterus majorensis*), found inside or outside the buffer zone of the farms.
The corpses or liver samples were received in the ULPGC Toxicology Laboratory for forensic toxicological evaluations. Only those birds that had georeferenced information about the place where they were found and furthermore, the good state of conservation of the animals allowed the sampling of the liver were included. The series of raptors included 308 individuals from 13 different species/subspecies: Accipiter nisus granti (n=9); Actitis hypoleucos (n=1); Asio otus canariensis (n=68); Buteo buteo insularum (n=53); Circus aeruginosus (n=1); Falco eleonorae (n=4); Falco peregrinus pelaginitoides (n=13); Falco subbuteo (n=1); Falco tinnunculus canariensis (n=69); Falco tinnunculus dacotiae (n=14); Neophron percnopterus majorensis (n=67); Tyto alba alba (n=5); and Tyto alba gracilirostris (n=3). The animals were sent by environmental officers or patrols if found dead, or by wildlife recovery centers if they had been admitted alive but euthanized or death within a week of admission. All carcasses were kept frozen at −20 °C, until they were necropsied. No animals were sacrificed for the purpose of this study. The livers, as the main organ for accumulation and storage of rodenticides, were used for this study [3]. Obtained during the necropsy, they were kept frozen at −20 °C until the preparation of the extraction and chemical analysis.

2.2. Chemical analyses

During these 10 years, we employed two extraction-detection methods for the quantitative analysis of all the anticoagulant rodenticides permitted in the EU (brodifacoum, bromadiolone, chlorophacinone, coumatetralyl, difenacoum, difethialone, flocoumafen and warfarin) [4]. All the solvents employed were of the highest purity available (>99. 9%, Honeywell, Morristown, NJ, USA). Ultrapure (UP) water was produced in the laboratory using a Gradient A10 Milli-Q System (Millipore, Molsheim, France). Standards for ARs and a procedural-internal standard (P-IS, (±)-Warfarin-d5) were purchased from Dr. Ehrenstorfer (Augsburg, Germany). All standards were pure compounds (purity from 98% to 99.5%). The method employed from January 2011 to November 2015 was a solid-liquid extraction followed of a LC-MS/MS analysis using a Thermo LC-MS/MS Accela Ultra instrument (Thermo Fisher Scientific Inc., USA) as previously described [5]. The method employed from December 2015 to May 2020 consisted on an extraction based on the QuEChERS method (Anastassiades et al., 2003), which has been fully validated in our laboratory followed by a LC-MS/MS analysis using an Agilent 1290 UHPLC (Agilent Technologies, Palo Alto, USA) coupled to an Agilent 6460 triple-quadrupole mass spectrometer, according to the previously described procedure [6]. All the quantitative data were obtained from at least two independent measurements.

2.3. Geospatial analysis of the data (GIS analysis)

The data about the place where the carcass was found were collected by Canary Islands environmental patrols and obtained by GPS tracking. We employed the QGIS Desktop software (version 3.12) for the analyses of geospatial data. The images were projected to the UTM 28N zone based on the WGS84 Geographic Coordinates System. Several vectorial map layers were created for animals positive for anticoagulant rodenticides; animals negative for anticoagulant rodenticides, farms of pig/cattle/sheep/goat production, and 1.5 km-buffer zones for farms, and all these were superimposed on the base map (OpenStreetMap).

2.4. Statistical analysis

The statistical analyses were done using the software package using GraphPad Prism v8.0 (GraphPad Software, CA, USA). First, the adjustment to the series of data to normality was examined using the Kolmogorov–Smirnov test. The distributions of the anticoagulant rodenticides
did not adjust to normality and therefore, non-parametric tests were employed. Thus, we used the Mann–Whitney tests for the analysis. Probability levels of less than 0.05 (two tailed) were considered statistically significant.

**Ethics Statement**

All samples were collected after obtaining the corresponding permits and following the animal welfare protocols during the sampling.

**Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships which have, or could be perceived to have, influenced the work reported in this article.

**Acknowledgments**

This research was supported by the University of Las Palmas de Gran Canaria via a doctoral grant to the first author Cristian Rial-Berriel (ULPGC-012-2016) and also by the Spanish Ministry of Education, Culture and Sports via a doctoral grant to the first co-author Andrea Acosta-Dacal (FPU16-01888).

**CRediT Author Statement**

**Guarantor of integrity of the entire study:** OPL  
**Study concepts and design:** OPL  
**Literature research:** CRB, AAD, MACP, ASP, AMM, OPL  
**Laboratory work:** CRB, AAD, ASP, NRS, ARH, AMM, MZ, LAHH, LDB, OPL  
**Data analysis:** CRB, AAD, NRS, MACP, AMM, OPL  
**Statistical analysis:** LAHH, OPL  
**Manuscript preparation:** CRB, AAD, MACP, ASP, AMM, MZ, OPL  
**Manuscript editing:** CRB, AAD, MACP, ASP, AMM, MZ, OPL

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