**SURVEY**

**Animal health interventions used for sheep and cattle on Islay: Livestock treatments and wildlife**

 

**Background**

Priority bird species that forage for dung and soil dwelling invertebrates are the conservation focus of this project. The species of focus is primarily chough, but other species (such as starling, lapwing, curlew and snipe) might also be affected by the issues raised. There are proven toxic effects, particularly on beetle species, of some livestock parasiticides of the macrocyclic lactone family, including doramectin and ivermectin. These parasiticides are widely used throughout the UK and the rest of the world. There is also a range of other treatments used as internal and external parasiticides, some of which are recommended as alternatives to ivermectin and as being relatively safe for invertebrates. However, many (including those recommended) have had little appropriate testing as to their wider environmental effects on invertebrates and other wildlife. In 2014 random block experiments on the effects of commonly used (non-ivermectin) cattle treatments on the abundance of invertebrates in cattle dung were conducted by RSPB staff. The results showed significant negative effects on dipteran larvae, resulting from commonly combined administration of drench and pour-on treatments. These are widely applied to cattle, sheep and lambs as pour-on endectocides and orally administered anthelmintic drenches. We intend to further investigate the direct and indirect effects of these treatments, both on dung and soil invertebrates and wider wildlife including birds, in particular chough. This will involve investigating the direct effect of parasiticides such as Ivermectin on birds as well as further investigating the effects of other treatments. For the development and planning of the most effective possible research studies, it is important to understand which products are being used by farmers, when they are used and how they are applied. This survey is intended to provide this information.

**Purpose of this study**

1. This study is intended to identify
   1. The livestock health problems that concern farmers in the coastal areas where chough are found
   2. The methods that farmers currently use to manage these problems
   3. The pharmaceutical products that they use to treat their livestock
   4. The time of year when livestock are treated
   5. The location of animals when they are treated (particularly whether they are housed or in the field.

**Use of results**

The results from this study will be used by the RSPB to design future research studies; to inform animal treatment management decisions on their own landholdings/management agreement areas on Islay, Colonsay and Oronsay; and to develop advice packages for other landowners where chough are found across the UK. The results of the research will be relevant to all those responsible for giving advice on all species that prey on dung and soil dwelling invertebrates.

**Confidentiality**

The data collected in the course of this project are confidential and will not be published in the public domain in a way that enables identification of individual land-owners or managers.

**Ethics**

This survey is approved under the University of Glasgow MVLS Research Ethics Committee.

**SECTION 1: ADMINISTRATION**

|  |  |  |
| --- | --- | --- |
| **Question** | **Response** | **Notes** |
| 1. Interview conducted by |  |  |
| 2. Date of interview |  |  |
| 3. Time of commencement of interview |  |  |
| 4. Time of conclusion of interview |  |  |
| 5. Farm ID (randomly assigned key) |  |  |
| 6. Role of interviewee on farm  Select and circle most appropriate response | 1. Owner/manager 2. Owner 3. Manager 4. Worker 5. Other |  |
| 7. Period in years that interviewee has been associated with the management of this farm  ANSWER IN YEARS ONLY |  |  |

**SECTION 2: THE FARM**

|  |  |  |
| --- | --- | --- |
| 1. What is the **total** area of this farm in hectares?  Please record answer in hectares (ha)  (1 hectare = 10,000 sq m or 100 m × 100 m; 1 ha = 2.47 acres) |  |  |
| 2. What is the area of land allocated to livestock grazing?  Please record answer in ha  If this area changes from year to year, give an indication of the amount of change |  |  |
| 3. What is the area of land allocated to cropping?  Please record answer in ha  If this area changes from year to year, give an indication of the amount of change |  |  |
| 4. What was the maximum total number of cattle of all classes on the farm in the last 12 months period? |  |  |
| 5. What was the maximum total number of breeding age female cattle on the farm in the last 12 months period? |  |  |
| 6. What was the maximum total number of sheep of all classes on the farm in the last 12 months period?  7. What was the maximum total number of breeding age female sheep on the farm in the last 12 months period? |  |  |
| 8. How many cuts of silage did you make last year? |  |  |
| 9. What was the approximate timing of the silage cuts? |  |  |
| 10. Approximately what proportion of the available grass is cut as silage each cut? |  |  |
| 11. When is pasture last grazed when silage is taken? |  |  |
| 12. Please describe the farm enterprise in general terms.  (List main outputs from the farm and or describe the business model) |  | |

**SECTION 3: HOUSING AND MANAGEMENT PROCEDURES**

Use a new sheet for each group of animals that has a different management plan.

Procedures can change from year to year. Please use the routine that was used in the preceding 12 months.

|  |  |  |
| --- | --- | --- |
| **1. Class of livestock** |  | |
| **MONTH** | **HOUSED** | **OTHER MANAGEMENT** |
| January |  |  |
| February |  |  |
| March |  |  |
| April |  |  |
| May |  |  |
| June |  |  |
| July |  |  |
| August |  |  |
| September |  |  |
| October |  |  |
| November |  |  |
| December |  |  |

|  |  |  |
| --- | --- | --- |
| **2. Class of livestock** |  | |
| **MONTH** | **HOUSED** | **OTHER MANAGEMENT** |
| January |  |  |
| February |  |  |
| March |  |  |
| April |  |  |
| May |  |  |
| June |  |  |
| July |  |  |
| August |  |  |
| September |  |  |
| October |  |  |
| November |  |  |
| December |  |  |

|  |  |  |
| --- | --- | --- |
| **3. Class of livestock** |  | |
| **MONTH** | **HOUSED** | **OTHER MANAGEMENT** |
| January |  |  |
| February |  |  |
| March |  |  |
| April |  |  |
| May |  |  |
| June |  |  |
| July |  |  |
| August |  |  |
| September |  |  |
| October |  |  |
| November |  |  |
| December |  |  |

|  |  |  |
| --- | --- | --- |
| **4. Class of livestock** |  | |
| **MONTH** | **HOUSED** | **OTHER MANAGEMENT** |
| January |  |  |
| February |  |  |
| March |  |  |
| April |  |  |
| May |  |  |
| June |  |  |
| July |  |  |
| August |  |  |
| September |  |  |
| October |  |  |
| November |  |  |
| December |  |  |

|  |  |  |
| --- | --- | --- |
| **5. Class of livestock** |  | |
| **MONTH** | **HOUSED** | **OTHER MANAGEMENT** |
| January |  |  |
| February |  |  |
| March |  |  |
| April |  |  |
| May |  |  |
| June |  |  |
| July |  |  |
| August |  |  |
| September |  |  |
| October |  |  |
| November |  |  |
| December |  |  |

**SECTION 4: ANIMAL HEALTH PRIORITIES**

|  |  |  |
| --- | --- | --- |
| For each of the following diseases, please state which of the following categories below best fits their importance to you and your farm.   1. Not important at all 2. Minor importance all the time or moderate importance in occasional years 3. Moderate importance all the time or quite important occasionally 4. Quite important all the time or very important occasionally 5. Very important all the time – major priority | | |
| **Disease complex** | **Rating** | **Notes** |
| Mineral deficiencies in sheep | 1 2 3 4 5 |  |
| Mineral deficiencies in cattle | 1 2 3 4 5 |  |
| Gastrointestinal worms in sheep | 1 2 3 4 5 |  |
| Gastrointestinal worms in cattle | 1 2 3 4 5 |  |
| Liver fluke in sheep | 1 2 3 4 5 |  |
| Liver fluke in cattle | 1 2 3 4 5 |  |
| Ticks and tick-borne disease in sheep | 1 2 3 4 5 |  |
| Ticks and tick-borne disease in cattle | 1 2 3 4 5 |  |
| Pneumonia/respiratory diseases in sheep | 1 2 3 4 5 |  |
| Pneumonia and other respiratory diseases in cattle | 1 2 3 4 5 |  |
| BVDV | 1 2 3 4 5 |  |
| Johnes disease in sheep | 1 2 3 4 5 |  |
| Johnes disease in cattle | 1 2 3 4 5 |  |
| Neonatal diarrhoea in sheep | 1 2 3 4 5 |  |
| Neonatal diarrhoea in cattle | 1 2 3 4 5 |  |
| Abortion in sheep | 1 2 3 4 5 |  |
| Abortion in cattle | 1 2 3 4 5 |  |
| Lameness in sheep | 1 2 3 4 5 |  |
| Lameness in cattle | 1 2 3 4 5 |  |
| Sudden deaths in sheep | 1 2 3 4 5 |  |

|  |  |  |
| --- | --- | --- |
| Sudden deaths in cattle | 1 2 3 4 5 |  |
| Plant (or other environmental) poisonings in sheep | 1 2 3 4 5 |  |
| Plant (or other environmental) poisonings in cattle | 1 2 3 4 5 |  |
| Predation in sheep | 1 2 3 4 5 |  |
| Predation in cattle | 1 2 3 4 5 |  |
| Fly infestation/fly strike in sheep | 1 2 3 4 5 |  |
| Fly worry of cattle | 1 2 3 4 5 |  |

**SECTION 5: ANIMAL HEALTH AND MANAGEMENT PROCEDURES**

Use a new sheet for each group of animals that has a different treatment plan.

Procedures can change from year to year. Please use the routine that was used in the preceding 12 months.

|  |  |  |
| --- | --- | --- |
| **1. Class of livestock** |  | |
| **MONTH** | **PRODUCT USED** | **OTHER MANAGEMENT** |
| January |  |  |
| February |  |  |
| March |  |  |
| April |  |  |
| May |  |  |
| June |  |  |
| July |  |  |
| August |  |  |
| September |  |  |
| October |  |  |
| November |  |  |
| December |  |  |

Procedures can change from year to year. Please use the routine that was used in the preceding 12 months.

|  |  |  |
| --- | --- | --- |
| **2. Class of livestock** |  | |
| **MONTH** | **PRODUCT USED** | **OTHER MANAGEMENT** |
| January |  |  |
| February |  |  |
| March |  |  |
| April |  |  |
| May |  |  |
| June |  |  |
| July |  |  |
| August |  |  |
| September |  |  |
| October |  |  |
| November |  |  |
| December |  |  |

Procedures can change from year to year. Please use the routine that was used in the preceding 12 months.

|  |  |  |
| --- | --- | --- |
| **3. Class of livestock** |  | |
| **MONTH** | **PRODUCT USED** | **OTHER MANAGEMENT** |
| January |  |  |
| February |  |  |
| March |  |  |
| April |  |  |
| May |  |  |
| June |  |  |
| July |  |  |
| August |  |  |
| September |  |  |
| October |  |  |
| November |  |  |
| December |  |  |

Procedures can change from year to year. Please use the routine that was used in the preceding 12 months.

|  |  |  |
| --- | --- | --- |
| **4. Class of livestock** |  | |
| **MONTH** | **PRODUCT USED** | **OTHER MANAGEMENT** |
| January |  |  |
| February |  |  |
| March |  |  |
| April |  |  |
| May |  |  |
| June |  |  |
| July |  |  |
| August |  |  |
| September |  |  |
| October |  |  |
| November |  |  |
| December |  |  |

Procedures can change from year to year. Please use the routine that was used in the preceding 12 months.

|  |  |  |
| --- | --- | --- |
| **5. Class of livestock** |  | |
| **MONTH** | **PRODUCT USED** | **OTHER MANAGEMENT** |
| January |  |  |
| February |  |  |
| March |  |  |
| April |  |  |
| May |  |  |
| June |  |  |
| July |  |  |
| August |  |  |
| September |  |  |
| October |  |  |
| November |  |  |
| December |  |  |

**SECTION 6: GENERAL COMMENTS**

Please comment on any aspects of animal health and or the abundance of birdlife on your farm that you think might be of interest. This might include changes in patterns of disease incidence, changes in your management operations, changes in the abundance of birds or other wildlife. Opinion is welcome.

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| --- |
|  |

**Thanks for your participation in this survey. Anonymous results will be made available through a variety of sources. All participants will be mailed a hard copy of the results when all data have been collected and analysed.**