

Enabling Scientists with the Government of Jersey and Earthwatch

<p>Name of Earthwatch's key environmental focus Creating Thriving Places to Live and Work</p>	<p>Lead contact details: Nathan Hayes n.hayes@gov.je Senior Scientific Officer - Biosecurity Natural Environment; Infrastructure, Housing & Environment; Government of Jersey</p>	<p>Second lead contact details: Tom Dixon t.dixon@gov.je Scientific Officer – Invasive Species Natural Environment; Infrastructure, Housing & Environment; Government of Jersey</p>
<p>Project title</p>	<p>Investigate the distribution of <i>Ixodes ricinus</i> (sheep tick) and the extent of infection with Lyme Borealis in Jersey.</p>	
<p>Aims & Objectives</p> <p>Following the finding of Lyme borreliosis in 2015 survey work was carried out to confirm the presence of the host <i>I. Ricinus</i> (sheep tick) and to determine risk of Lyme borreliosis in Jersey. The study confirmed the presence of the Sheep tick as well as <i>Borrelia burgdorferi</i> sensu lato (s.l.). The prevalence of infection of <i>I. Ricinus</i> was 15.2%. However, due to small sample size there is a requirement to get more detail into the distribution of the <i>I. Ricinus</i> and the prevalence of the Lyme causing bacteria.</p> <ul style="list-style-type: none"> • To net survey for ticks across the island • To identify the ticks • To send away <i>I. Ricinus</i> to determine infection with Lyme causing bacteria • To write a report detailing findings 		
<p>Project description</p> <p>Ticks have been sampled in Jersey and have been found to be hosts for Lyme borreliosis. There is a need to get greater information on the extent of this.</p> <p>The intern will complete research that will include:</p> <ul style="list-style-type: none"> • Surveying for tick species in Jersey. • Identifying tick species in Jersey. • Sending samples away for analysis. • Understand tick hotspots and risk to public. • Review public friendly information regarding the risk to ticks Ticks and Lyme disease (gov.je) <p>The intern will produce a report on the distribution of ticks in Jersey. This report will include the extent of infection for the ticks. The intern will work with local/external experts in order to survey for and identify the ticks. This may involve liaising with colleagues in Guernsey and/or the UK.</p>		

The project will be split into 3 key areas:

- Field work
- Lab work
- Analysis & Report writing

The intern will summarise findings into a report which will update to the extent I. Ricinus on the island and the prevalence of infection (Lyme). This can be used going forward to inform further monitoring effort as well as public awareness campaigns.

Link to policy

[Sustainable Development Goal \(SDG\) 3.3](#) is to end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases by 2030.

[ECDC decisions and regulations \(europa.eu\)](#) - Regulation (EC) No 851/2004 of the European Parliament and of the Council of 21 April 2004 establishing a European centre for disease prevention and control.

[Economic Framework for the Rural Environment 2022](#): provide a clear structure within which Government interventions are directed in a manner which is accountable, measured, valued and reported; and contributes fully to the delivery of a vibrant and sustainable rural sector, providing employment and economic opportunity, enhancing our natural capital and maintaining rural life as an integral and valued part of the Island's cultural identity, specifically policies; Land and Ecosystem – Land-based community Well-being (Policy LE2) - The Government of Jersey will ensure that opportunities for enhancement of the well-being of the community through connection with the land are maintained and promoted.

By understanding the risks associated with certain areas of our island will aid us in safeguarding it's use for the public now and in the future.

Rural development – Animal Welfare (Policy RD4) - The Government of Jersey to ensure the highest standards of animal welfare are maintained with the required regulatory and legislative framework, and by supporting industry to meet required standards and operate best practice.

[Common Strategic Policy 2023 to 2026](#) Health and Wellbeing - Provide and regulate good quality healthcare and social services, promoting better health and wellbeing underpinned by improvements in public health, Environment - Protect and enhance our urban, rural and marine environment so that everyone can continue to enjoy its benefits, moving purposefully and fairly on a path to net zero emissions.

Additional Funding

This Earthwatch Internship project meets part of the requirements set out in the approved proposition. A strategic outline business plan is currently being drawn up to cost the project in its entirety. However, any additional funding for this project will be made available from Government of Jersey.

Duration

The project will commence Summer 2023 and will run for 8 weeks.

Specific experience or skills required

The project is an 8-week Earthwatch Internship base in Jersey during the summer and includes access to the Earthwatch on-line Community Science Camp.

Entomology experience would be beneficial, and the field work will need to be completed in August & September.

It would be desirable if you had your own transport. It will be possible to claim mileage.

Community Benefits/Customer(s)

1. Government of Jersey: will gain a better understanding of the extent of *I. Ricinus* in Jersey and the extent of its infection with Lyme borreliosis. To inform public health campaigns as necessary.
2. Island community: better information on the risk of ticks in Jersey (areas to avoid/be vigilant).
3. Enabling individuals: Support new scientists who are on the path of becoming conservation scientists with a passion for and expertise in engagement, who need further support on their journey. Investing in emerging scientists now will help secure a generation of connected, inspired and inspiring individuals who see the value of field science to provide knowledge about the world around us.