

# Lights in the Dark

## Funding Proposal for the captive breeding, reintroduction of and public engagement in the Glow-worm

### *Lampyrus noctiluca* in Britain

**Background** -Glow-worms, despite their name, are a species of beetle that favours rough grasslands, meadows, rides and verges that are rich in their snail and slug prey – but it is the female's ability to produce a **bioluminescent** glow that has led to this species being revered by humans for millennia.

After spending 2-3 years as larvae, the adults live for only 2-3 weeks, but it is in this time that the female glows to attract a potential mate, with a light produced by a biochemical reaction strong enough to be visible up to 10 metres away. Glow-worms don't disperse very far, this means that they are very susceptible to isolation effects, lessening genetic variation and increasing local

extinction risk. This means that even suitable sites may remain uncolonised. Intensified agriculture, 'tidy' gardening, repeated mowing, strimming, routine use of pesticides, herbicides, and increased light pollution have cumulatively resulted in a massive decline in this animal's numbers.

## When did you last see a Glow -worm?

It has been found that only 1 in 4 typical schoolchildren in the UK couldn't identify a badger, half didn't know what bluebells look like, and 83% were unable to identify a bumblebee.

This growing disconnect from the natural world is only going to speed its downfall and much greater engagement is needed to reverse this trend. This is why we have chosen the **Glow-worm** to shine a light in dark times, a creature that **glows in the dark** A shining emblem of hope.

Now, two years since the outset of our captive breeding programme in 2020, we are proud to announce that our success has allowed us to share not only our knowledge and expertise but also send two batches on breeding loan to other prestigious organisations Manchester Museum and the Wild Wood Trust, further reinforcing the reach and success of this novel and heart warming scheme. Based on our own 25+ year experience in the successful reintroduction of other native species, we will continue to host captive colonies in the optimal conditions to supply a large, healthy source that can be introduced to carefully determined sites.

We have already received demand for this project. Release areas will be driven by landowner and community interest in restoring the species and associated habitat creation. As a charismatic insect with an ecology that captures the imagination of even the most distantly removed from nature, we hope the engagement process with glow-worms will be two-fold. Firstly, release projects which will not be isolated to a specific conservation group, but participatory across young and old within the community and create a sense of pride in restoring glow-worms to 'their patch'. This could be community meadows, farms, churchyards, schools and many more.

**Proposal** - Our method is two fold:

Firstly, using the charismatic Glow-worm project as a flagship for restoring the **habitat** that Britain's depleted nature needs, we are offering an illuminated icon to reconnect communities with their local wildlife. Where much of the news of species decline continues to bring negative feelings of hopelessness, we hope that around this one intriguing insect, people can rally and use it as a beacon to guide them towards a vibrant, wilder, more nature rich future. Quite literally, shining a light in the dark.

Secondly, to support our work creating the first large-scale captive breeding, rearing and release project for Glow-worms to secure their presence for future generations.

Primed and with several successful pilots under our belt, we are now ready to scale up and begin our outreach in earnest.

**Budget** - For this 'glowing the dark' project KEEP IT WILD are seeking £10,000 of funding, though smaller pledges are most welcome.

This is intended to cover:

- Purchase of materials for larvae collection.
- Construction of specialised captive breeding and rearing facilities.
- Provision of food and temperature control for livestock.
- Staff and consultant fees directly involved in the project.
- Necessary travel and accommodation for aforementioned persons.
- Public Relations and outreach, content creation including film work, media communication and engagement work with an emphasis on school children .

For more information visit [www.keepitwild.uk](http://www.keepitwild.uk)

Email -[nick@keepitwild.uk](mailto:nick@keepitwild.uk)

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