

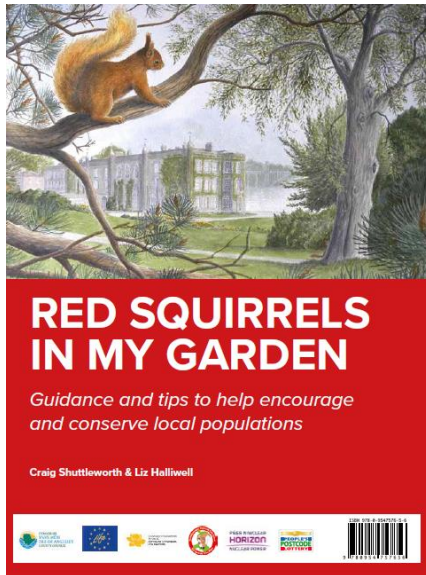
Proactive & Reactive contingency plan for Anglesey

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Preamble

Preparatory work for **Red Squirrels United** project (*EU LIFE14 NAT/UK/000467*) included the production of the **Red Squirrel (*Sciurus vulgaris*) Conservation Plan for Anglesey & Gwynedd** in 2016 ². Section 4 (pp 12-14) of the paper contains baseline aims and objectives to limit the probability of grey squirrel reinvasion of Anglesey and to detect mainland incursion. The document provides an important regional framework within which a contingency plan will operate.



In 2018, European Squirrel Initiative published a free PDF bilingual English/Welsh e-book³ which contains practical guidance on the conservation of red squirrels.

Chapters describe the impact of non-native grey squirrels on red squirrel populations and provide details of how to differentiate red and grey squirrels from size, shape and pelage characteristics. The book can be downloaded from a range of online websites and social media platforms. Hard copies were also distributed free to schools on Anglesey and in Gwynedd.

The volume empowers local communities with the knowledge required to make informed management decisions in relation to squirrel populations. The last page provides contact details for regional conservation bodies. Readers are encouraged to record and report sightings of both red and grey squirrels.



¹ <https://www.bangor.ac.uk/natural-sciences/staff/craig-shuttleworth/en>

² Shuttleworth & Halliwell (2016) Red Squirrel (*Sciurus vulgaris*) Conservation Plan for Anglesey & Gwynedd. Red Squirrels United - EU LIFE14 NAT/UK/000467

³ Shuttleworth & Halliwell (2018) Red squirrels in my garden: Guidance and tips to help encourage and conserve local populations. ESI.

Contingency plan

Through the EU LIFE14 NAT/UK/000467 project, Anglesey has established a centrally co-ordinated (via Red Squirrels Trust Wales) and volunteer based early warning network to detect grey squirrels. There are currently 199 garden or forest feeding stations monitored by members of the public. The project has provided 50 of these feeders, whilst the remainder have either been purchased privately or local people have manufactured their own using plans available online.

A Microsoft excel database contains the following information:

- Name, email, postal address, the number of feeders (if more than one are at a location), an eight figure grid reference, details of the types of feeder and food types typically provided.

The network enables rapid communication of sightings along with details of animal behaviour and photographs. In response to reports, Red Squirrels Trust Wales will:

- Rank multiple reports of grey squirrels, prioritising (1) those with corroborating photographic evidence, (2) then those with multiple reports from the same approximate area but where no photograph is available, and then (3) single sightings where the observer has demonstrated a knowledge of the key difference between red and grey squirrels beyond colour patterns.

Following the ranking exercise, the response to sightings will include:

- (1) Identifying woodland owners and gaining access permission.
- (2) The setting of live capture traps (following standard best practice techniques⁴) or shooting if condition are suitable.
- (3) The deployment of Bushnell remote sensor wildlife surveillance cameras set to video, standard sensor sensitivity, a ten second record period and subsequent 10 second delay
- (4) The recognition that camera traps may not always detect grey squirrel presence even where an animal has established a range area.⁵
- (5) Recording data on trap and camera effort (number of units x days operated) and of species capture/images.
- (6) Collection of sex and biometric data from captured grey squirrels
- (7) Collection of blood, spleen, gut and hair samples
- (8) Ensuing that press, social media and local landowners are informed and provided with regular progress reports.

⁴ Mayle et al. 2007 Forest Practice Note 4

⁵ In the autumn of 2017 there were multiple reports of a grey squirrel at Friars Bay, Llanfaes, Anglesey at SH6109 7788. The first was received on 13/9/2017 and in response three camera traps were erected on seed bait within 100m of this location. During the following week no images of grey squirrels were recorded. In the meantime additional public sighting records were received from the location and a second camera trap session was undertaken. Again, whilst no images of grey squirrels were obtained, public sighting continued. Traps were set and operated by householders and on 28/9/2018 a female grey squirrel was caught (580g, 262 body length, non-breeding).

The following agencies and non Government organisations will be contacted during an potential incursion event:

- Natural Resources Wales (Statutory nature conservation body in Wales)
- North Wales Wildlife Trust
- Anglesey County Council (Local Authority)
- Animal Plant Health Agency (managers of the UK Wildlife Disease Scheme).

Importantly, given that the ‘monitoring’ of feeders forms a key element in strategic planning to maintain Anglesey as a red squirrel refuge, during every stage of operation within the contingency plan, Red Squirrels Trust Wales will update the volunteer network via email.

Proactive activity to improve detection of incursion

Red Squirrels Trust Wales will continue to expand the size of the current volunteer invasive species detection network via online platforms and other outreach. They will also evolve the provision of advice, support and guidance to incorporate findings from other invasive species projects.

The Trust have established, and will continue to undertake, long-term surveillance using a network of wildlife cameras in coastal woodlands either side of the Menai Strait including Coed Mor (SH 54077 71376), Plas Newydd (SH 52616 70709), Faenol (SH 53757 70666) and Treborth (SH 54958 71130). The detection of grey squirrels in triggers culling operations.

Proactive activity to reduce incursion probability

The Trust have established collaborative working with LIFE Laser Fence (LIFE15 ENV/UK/000386) with a view to quantifying the potential integration of this new technology in order to limit grey squirrel dispersal across the Menai sea strait from Gwynedd to Anglesey. The application to one or both of the two bridges over the sea channel will be explored.

We have identified sea-ferry, road and rail transport as potential accidental or



deliberate 'human-mediated' routes for the spread of grey squirrels into as yet uncolonised landscapes (such as Anglesey). For example, in December 2016 a healthy grey squirrel was found trapped within a vehicle engine bay by the vehicle owner⁶. The animal had been struck by the car and the impact had thrown it through the plastic front grille.

⁶ <http://www.walesonline.co.uk/news/wales-news/grey-squirrel-lucky-alive-after-12314674>

In that case, we worked with North Wales Police rural crime officers and Royal Society for the Prevention of Cruelty to Animals (RSPCA) officers to develop a future protocol to be used in such circumstances.

When a stow-away is discovered:

- (1) Red Squirrels Trust Wales will be made immediately aware of the discovery of an animal within a vehicle.
- (2) Attempts to remove the animal from the vehicle will minimise the risk of escape into the wider environment if the vehicle is on Anglesey or in the Gwynedd mainland area defined in EU LIFE14 NAT/UK/000467.
- (3) An animal accidentally being transported will only be released into the wild by third parties at a point outside of the EU LIFE14 NAT/UK/000467 geography (Note that under UK Government guidance, an invasive mammal listed under Schedule 9 of the 1981 Wildlife & Countryside Act can be freed back into the wild if it was entrapped accidentally).
- (4) Any press statements will reflect the fact that these animals are invasive non-native species which cause significant ecological and economic damage in Europe.
- (5) Where possible, the origin of the animal will be estimated from information obtained from discussions with the vehicle owner. Vehicle owners will be asked for the recent route/journeys undertaken in the vehicle.
- (6) When an animal is culled, biometric measurements will be recorded and tissue samples collected. Where possible the samples will be screened for zoonotic infection.
- (7) A file note will be created and the document shared with the four agencies listed (Page 3).

Future steps

Red Squirrels Trust Wales are currently lobbying the Welsh Assembly Government to put in place measures to prevent grey squirrels from being able to cross the Menai Strait by means of a third bridge, should this additional infrastructure be constructed.

In addition, the Trust has approached Stenna line (a sea-ferry company sailing between Anglesey and Ireland) to try and improve on board surveillance for grey squirrels in freight wagons.