Proposed goals

Our aim is to develop a software which can distinguish different species within a photo (if there is any). We will not be able to classify a photo if there are not enough data (entries from 'spotters') provided. When there is sufficient data on a particular photo, our algorithm is to classify the species and the certainty of the classification. We store the classification and certainty in a new table in the data base. Once a photo has been correctly identified, they will be retired (not shown to spotters anymore). The algorithm is to be implemented with criteria similar to the Swanson et al (2015) and to have a threshold for correct classifications.

Our end users are going to be the scientist running the MammalWeb project. We are to provide a reliable platform for the scientists to upload new data and download relevant data from the data base.

We are also to provide a backend interface which allows the scientists to apply a filter and select data that meets the criteria (e.g. Date, site etc.), and they can either view or download the data (in .csv format) and do further analysis if they wish. An estimation of numbers of different species in a given area then can be derived from the processed data. This allows the scientists to monitor wild mammals in England much more efficiently without needing to go through thousands of photos manually.

\*\*(maybe)

We will also implement an algorithm which will decide the likelihood of a photo shown to the spotters, where the photos with more classifications will have a higher chance, increasing the retire rate.

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We will try to implement a user dashboard for the website. While the volunteers are classifying photos on their individual user accounts, they have an option to ‘like’ the photo if they find the photo particularly interesting. The dashboard will then be able to show the users their favourite photos. They can also view their uploaded photos and their classifications from the dashboard.