



Predation assessment on fake caterpillars and leaf sampling: Protocol for partner schools

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ABSTRACT

The 'Oak bodyguards' citizen science project aimed to assess the effects of climate on two key biotic interactions occurring widely in natural and anthropized ecosystems, i.e., the top-down and bottom-up forces controlling insect herbivory on leaves of the English oak (Quercus robur) trees. We chose the English oak as a model species as it is one of the most common and most emblematic forest trees in Europe, with a geographic range spanning more than 19 degrees of latitude. It is also widespread in both rural, suburban and urban environments. We exposed dummy plasticine caterpillars in trees to estimate predation rates. We additionally estimated leaf insect herbivory as the percentage of leaf area removed or damaged by insect herbivores. The Oak bodyguards project involved professional scientists and school children throughout Europe. We designed a simple protocol that was applied by both partner types. The protocol was written by scientists in collaboration with science instructors and communication officers. It was available in five languages: French, English, German, Spanish and Portuguese. The present document is the English version of the protocol. It describes how to estimate insect herbivory on oak leaves as well as predation rate on artificial prey made with green modelling clay.

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