

FLUORESCENCE IN EUROPEAN OWLS

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Ultraviolet light can stimulate fluorophores (chemical compounds responsible for fluorescence), producing fluorescence. This phenomenon has been observed in a wide range of animals, from invertebrates to mammals. The colour of the fluorescence varies with the type of fluorophore. In many bird species' feathers the principal fluorophore is porphyrins - an abundant biological pigment group, that is mainly found in brown to red feathers and produces a reddish-orange fluorescence. Although fluorescence records exist for some owl species, a systematic study of all the species inhabiting the European continent has never been carried out. We investigated the thirteen species of owls present in Europe and found, for the first time, fluorescence in all of them. Particularly interesting was the finding of fluorescence in the snowy owl (*Bubo scandiacus*), which is the only European owl species that has been previously reported as "non-fluorescent". We examined the body and feather distribution of fluorescence in owls, showing similarities between species. Further investigations are needed to clarify if fluorescence may have some biological functions for owls.