The thesis puts mind to possibilities of using mammal's skulls in classes of natural science. The work gathers from foreign materials about this subject matter and tries to pass them to the Czech ambient. The first part of the text summarizes theoretical observations about skulls, teeth and owl pellets from which suggested activities proceed. In methodology there are described the ways of skull cleaning and methods of owl pellets collecting and identification of osteologic fragments contained in them. Two units of classwork are the work produce, the first one dedicated to owl pellets dissection, the second one focused on skull identification and life modes derivation from skull characteristics. The authoress successfully tried these proposed activities with pupils from sixth and eighth classes of primary school.