

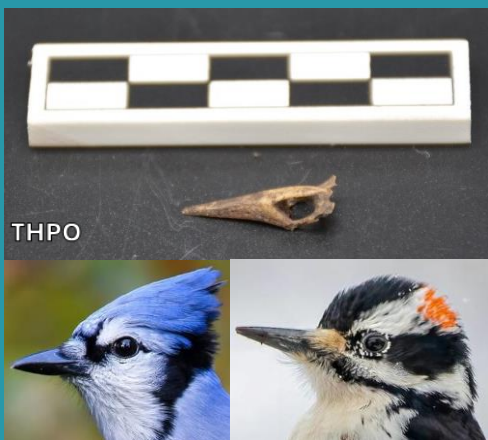
ARTIFACT OF THE MONTH

October 2024

If we are lucky, the artifacts the THPO's Collections acquire have some form of defining features on them that can aid in identification. This bird beak is one of those fortunate cases. Through careful inspection, we can observe that the beak has some bone protrusions toward the back curving upwards, which is likely a portion of the skull. It also has two holes, which are the nares. Given these features, we can gather that this bone is the upper jaw of the bird. Knowing this, we can begin to narrow down what bird species it may have belonged to.



Using the general morphological information about the beak, we can narrow down likely bird species through comparative analysis. For example, we can examine the nares, shown in the figure above. The ones we find on this beak are rather large and oval in shape, which provides a distinct feature from which we can work. From this, we can determine the two types of birds fitting these constraints: blue jays and woodpeckers.



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taken by
Steven
Martin

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Matthew
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Florida sees about nine different species of woodpecker throughout the year (Moran, 2023). Woodpeckers all possess a chisel-like beak that they use both for foraging as well as communication (Jung et al., 2016). Possessing a straight, chisel-like beak helps with both processes and makes them more efficient, as they can peck upwards of 20 times a second when performing either of these activities (Jung et al., 2016).



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Blue jays are more closely related to crows and ravens than Woodpeckers. While Woodpeckers use their beak to peck through wood for foraging, blue jays possess a similar beak due to their preferred diet. These birds are important seed-dispersers within the Eastern US and enjoy acorns as their preferred food (Dixon et al., 1997). Due to the extremely hard shells, the blue jay is thought to have developed adaptations to their beaks that allow them to chisel through them (Richardson et al., 2013). It is thought that the adaptations that allow woodpeckers to dig through wood could serve a similar function (Richardson et al., 2013).



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