

Seven frames from the Luneau video, showing (top to bottom) one complete wingbeat cycle. Six frames show the wings in various stages of the downstroke; the upstroke happens quickly in the fourth frame. The critical identification questions are:

1. In the second frame, why is the brightest white far from the body with little white close to the body?
2. How could a bird with white flight feathers largely disappear against a dark background (fourth frame)?
3. Why are the secondaries on the left wing black (fifth frame)?
4. How could the partially white wingtip of an Ivory-bill produce the broad black band shown curving around the wingtip in the sixth frame?
5. How could the all-white secondaries of an Ivory-billed Woodpecker produce this image showing no white on the left wing (seventh frame)?

These patterns are repeated consistently in each wingbeat cycle through the video. We conclude that only a Pileated Woodpecker could show this combination of field marks.

