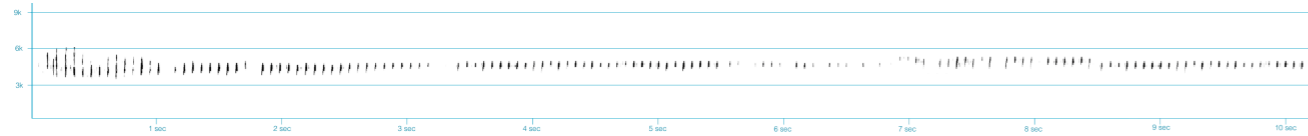
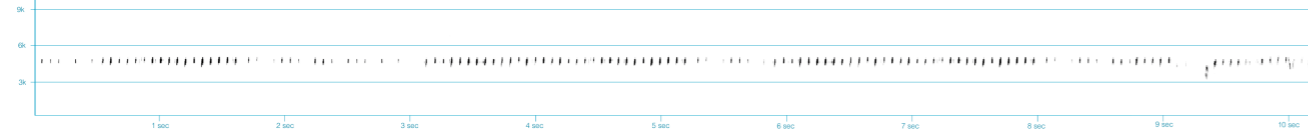


The flight display of American Woodcock

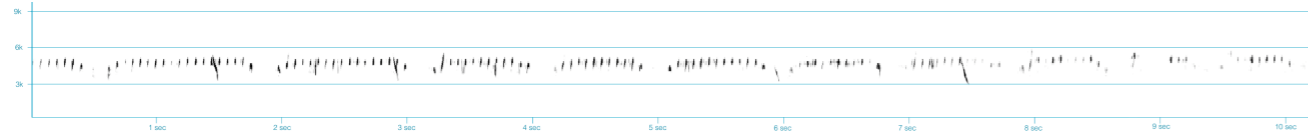
A The first ten seconds of the American Woodcock's flight display is a gradual ascent in wide spirals; rapid wingbeats produce a steady twittering sound.



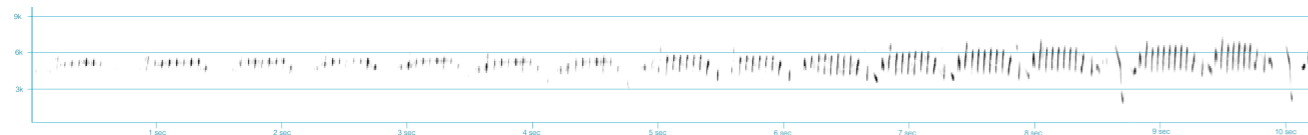
B In the next ten seconds the bird continues a gradual ascent with steady twittering wingbeats, leveling off at around 20 seconds.



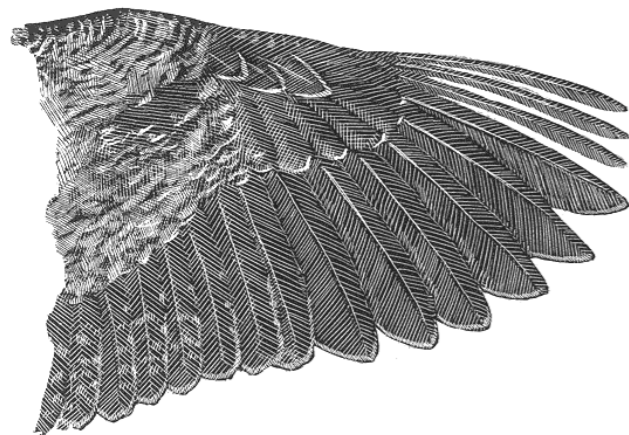
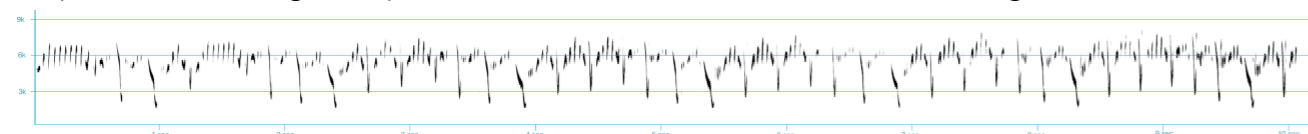
C From 20 to 30 seconds the bird circles at high altitude, slightly undulating with wingbeats in bursts producing pulses of twittering. These pulses get shorter as the flight continues, and there are a few louder sharp chirps inserted randomly.



D From 30 to 40 seconds the bird continues to circle, the flight becomes more strongly undulating and the pulses of twittering sound become shorter, more rapid, higher-pitched, and more emphatic-sounding, with more loud chirps added.

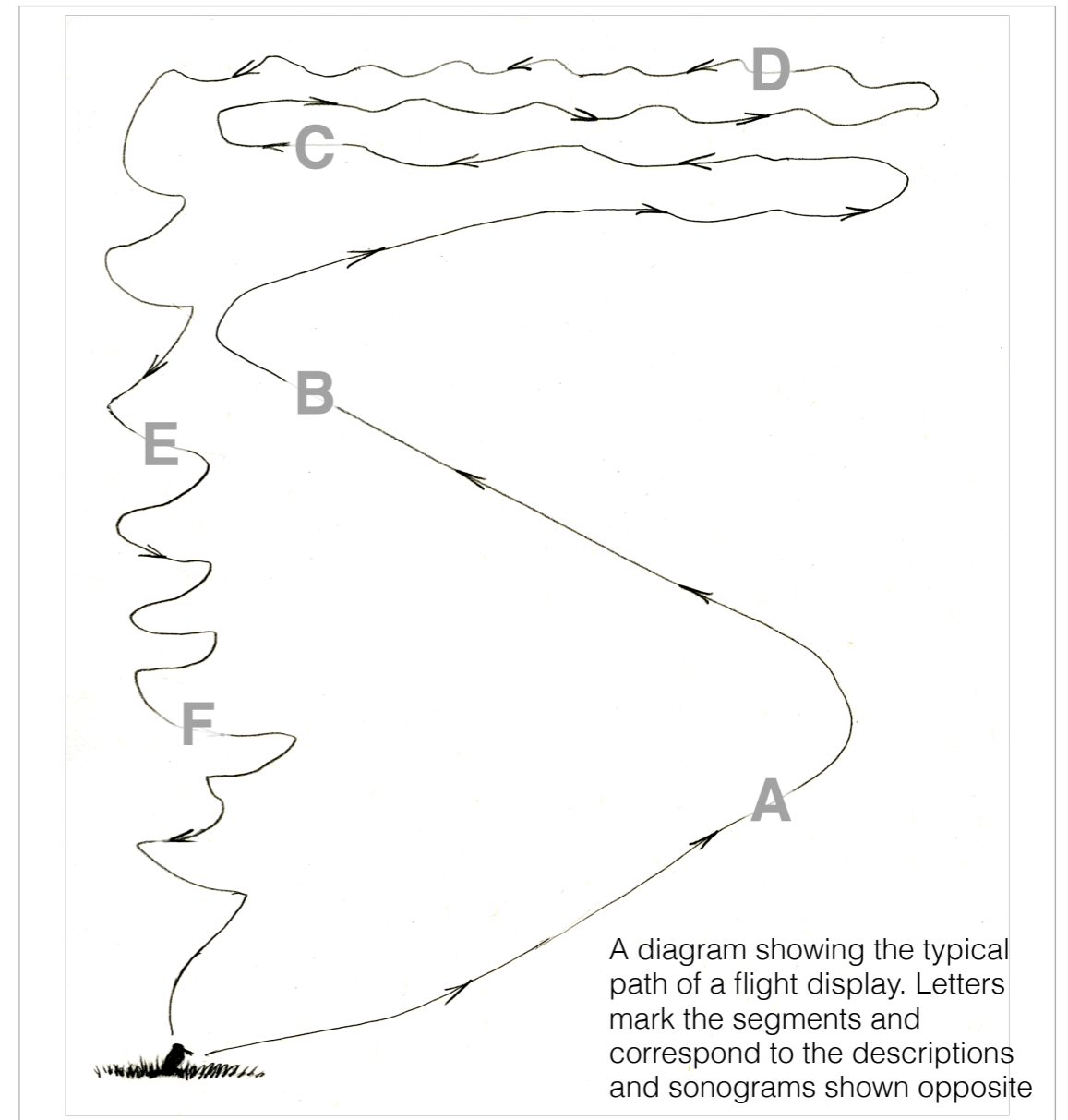


E In the final ten seconds the bird begins to descend, at high speed and swerving back and forth. The sounds become much more varied and emphatic, with loud chirps in a regular series of alternating triplets, each chirp separated by a very short burst of high-pitched twittering. The performance ends when the bird nears the ground.



The spread wing of a male American Woodcock, showing the three modified outer primaries that produce a whistling sound in flight. Immatures and females have slightly broader outer primaries, and presumably make a slightly different sound.

From about January through June (wherever the ground is thawed and snow-free) male American Woodcock gather in favored grassy clearings in the half hour after sunset and before sunrise to perform. A nasal *peent* note is given from the ground, and a high twittering sound produced by the wings in a one-minute-long flight display. Both sounds are known only from males.



F A closer look at the final few seconds of the display flight, as the bird descends rapidly with abrupt changes of direction. The loud chirps appear as tall, nearly vertical slashes, and follow a very regular rhythmic pattern.

