



Movie 1. Video recording of blood flow through the spectacle of a juvenile corn snake during the renewal phase of the integument. The vessels are being visualized by reflecting light off the retina (i.e. they are retro-illuminated) so the illuminated portion corresponds with the pupil of the eye. The blood vessels exhibit the typical vertical layout that is characteristic of colubrids. The many small dark lines are scratches in the spectacle scale that accumulate during a snake's routine activities and that will be shed with the old scale when the animal moults. At ~6 s into the video, a shift occurs in the snake's gaze, but the vessels remain fixed, demonstrating how the eye rotates freely beneath the fixed spectacle.