



**Movie 1.** High-speed video of a tethered intact fly. All high-speed videos were captured at 2000 frames per second (cameras by Fastec Imaging, San Diego CA).



**Movie 2.** High-speed video of a tethered fly with haltere bulb ablated. The remaining haltere stalk can be seen oscillating.



**Movie 3.** High-speed video of a tethered fly with halteres ablated. Note that there is no visible haltere movement, and that wing strokes are not obviously altered by haltere ablation.