

## Well Balanced Birds



**Purpose:** To show that an object whose center of gravity is below its support point is easily, stably balanced, even on a knife edge (as shown).

**Location:** room 136, shelf M5

These birds have lead weights in their wingtips, which extend below their beaks, thus permitting them to be easily balanced on the tips of their beaks. Pass them out and let the students balance them on their fingers or on their pencil erasers or on their nose! Point out that a small displacement (i.e. tilt) from equilibrium results in a restoring torque. Have the students imagine the center of gravity as a pendulum suspended from the support point on a rigid rod.