

MOUNT BIGELOW OBSERVATORY

The Mount Bigelow Observatory is located on Mount Bigelow in the Catalina Mountains of southern Arizona at an elevation of 8230 feet and is currently owned and operated by the Steward Observatory of the University of Arizona. The observatory site consists of two telescopes and a ten-room (six bedroom) dormitory to provide accommodations for the visiting astronomers. The two telescopes are a 61-inch Kuiper telescope operated by the Steward Observatory and the 30-inch Schmidt telescope operated by the Catalina Sky Survey.

The 61-inch Kuiper telescope was funded by NASA and built in the early 1960s to survey the Moon in preparation for the lunar landings of the U.S. Apollo program. The University of Arizona operated the telescope in support of this task with the resulting Atlas of the Moon being called “the finest ground-based photographic lunar survey ever done”. Once its support of the Apollo program was completed, the University has continued to operate the telescope in support of the astronomy programs of Arizona State University and the Northern Arizona University as well as that of the University of Arizona.



61-inch Kuiper Telescope
Photo by T. Johnson – April 2014

The 30-inch Schmidt Telescope is currently used by the Catalina Sky Survey to locate and inventory near-earth objects (NEOs). NEOs are asteroids that have a potential to impact the earth and cause catastrophic consequences. The Sky Survey is the result of a 1998 congressional directive to NASA to conduct a program to identify 1 km. or larger bodies to an estimated 90 percent confidence level. In June 2006 this directive was expanded to require the identification and inventory of all NEOs with a diameter larger than 140 meters. The telescope scans over 800 square degrees of sky and detects well over 1000 asteroids every night. The Catalina Sky Survey is one of three survey groups working on the identification of NEOs.



30-inch Schmidt Telescope
Photo by T. Johnson – April 2014

Summary by T. Johnson in April 2014 from various web sites.