From: AAS Mail <aasmail@aas.org>
Subject: AAS Informational Email 2007-6
Date: February 20, 2007 6:23:45 AM PST

To: aasmembers@aas.org

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Summary

An observatory located in eastern Washington is under threat of closure through a reassessment by the Fish and Wildlife Service of the conservation plan for the public lands where the observatory is located. Opportunity to provide public comment has been extended to March 10. The small non-profit operating the observatory as a research and educational facility has asked the AAS to inform its members of this possible loss of a valuable observational resource. The observatory is the largest telescope in Washington and is located in a dry, high-altitude site.

Background [provided by Ken Swanson, Executive Director of AASTA, which operates the Rattlesnake Mountain Observatory]

[Note: The draft conservation plan and instructions on submitting public comment can be found here: http://www.fws.gov/hanfordreach/, the website of the non-profit running the observatory is http://www.aastaonline.org/.

Rattlesnake Mountain Observatory is a small, professional astronomical facility located on Rattlesnake Mountain in southeastern Washington State.

The observatory's primary instrument--a 0.8-meter Cassegrain telescope--is the largest telescope in the state, and is valued at approximately \$500,000.

Built in 1971, the telescope is a pioneer in the use of friction-roller drive mechanics (as opposed to gears). It was central to a considerable astronomical research through the mid-1980s, after which it fell into relative disuse.

In the mid-1990s, a group of scientists, educators, and other community leaders formed the Alliance for the Advancement of Science Through Astronomy (AASTA)—a 501(c)(3) non-profit corporation dedicated to the use of astronomy as a tool for significantly enhancing the quality of science mathematics instruction at all levels in our educational system, and to make available the kinds of research-quality instruments previously only available to professional researchers.

In 1996, AASTA assumed management and operational authority of the observatory, and has been working to refurbish the facility--replacing electronics, computers, cleaning optics--with the objective of establishing remote, Internet-based access to the telescope its associated operational hardware, accompanied by directed curriculum enhancement with local schools to take full advantage of the unique capabilities of this instrument.

Significant progress has been made at the observatory--nearly \$200,000 in cash, equipment, and in-kind donations has been directed towards the refurbishment activities. The telescope is currently under local computer-based control, whereby an observater, located within the dome and situated at the control console, can choose from several catalogues of celestial targets, command the telescope to move to a specified target, and track the target as it moves across the sky. The dome azimuth is synchronized with the azimuth of the telescope, and will automatically align itself with the celestial target. This is the necessary prerequisite to remote, and eventually automated, use of the telescope.

The observatory is located within the Fitzner-Eberhardt Arid Lands Ecology (ALE) Reserve--an area of the Hanford Nuclear Reservation originally

(ALE) Reserve--an area of the Hanford Nuclear Reservation originally established as a buffer zone, and consequently largely untouched by human activity. In June 2000, by Presidential proclamation, the ALE reserve became part of the Hanford Reach National Monument, and is now under the jurisdiction of the U.S. Fish and Wildlife Service.

At the present time, Fish and Wildlife is accepting public comment on their draft Comprehensive Conservation Plan (CCP) which will guide management of the Monument for the next 15 to 20 years. Three of the six alternatives presented in the CCP specify the complete removal of the observatory from the top of the mountain and restoration of the siste to its natural state.

All members of the American Astronomical Society are encouraged to review the draft CCP and to express their opinions, with particular emphasis on the proposed removal of the observatory (specified in Alternatives B, C, and F).

The plan can be accessed at http://www.fws.gov/hanfordreach/

Comments need not be more than one or two paragraphs, and can be submitted electronically or through traditional mail. It is important that the members of the professional astronomical community identify themselves as such, and emphasize the continued and expanded

use of professional meter-class facilities such as that at Rattlesnake Mountain Observatory, not solely for the direct support of astronomical research programs, but for use as a tool for science

Astronomy has tremendous public appeal, and is unique among the physical sciences in this regard. Only a privileged few are able to pursue astronomical research professionally, yet the principles around which the science is founded are immediately applicable to all branches of such fields as physics, chemistry, biology, geology, and nuclear engineering. The use of astronomy within the educational system—as embraced by the activities at Rattlesnake Mountain Observatory—for science and mathematics curriculum enhancement will have a significantly positive impact on the quality of graduates, and on the continued public support, interest, and involvement in the astronomy and other physical sciences for generations.

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