

## **Project title: The Eagle Hill Astronomy Resource Center**

The Eagle Hill Institute's astronomy initiative will result in the construction of an Astronomy Resource Center with an observation tower and a planetarium on the coast of Maine on the summit of the peninsula to the immediate east of the Schoodic Point section of Acadia National Park. This places the Center within the last dark sky region of the east coast of the United States, thus allowing it to promote its missions in astronomy while helping to promote the importance of dark sky initiatives.

The Astronomy Resource Center is planned as an integral part of the campus of the Eagle Hill Institute, a 501(c)(3) nonprofit organization with a 25-year regional, State-wide, national, and international reputation as a high-level academic and scholarly organization, with an exemplary record for its teaching programs and for its three peer-reviewed scientific journals. The Institute will provide immediate full-spectrum logistical support for the Center, including space for living accommodations and dining, an office, meetings, fundraising dinners, and library resources, including high-speed internet service (through the Maine School and Library Network).

At the core of the plans for the self-supporting Astronomy Resource Center is an intensive semester-long guided independent studies residential program in astronomy. In parallel with this, there will be opportunities for day and evening visitors and weekend guests to participate in open sky and telescope viewings, lectures, planetarium shows, classes, independent studies, and guided research. These programs will be offered by visiting astronomers, astronomers-in-residence, astronomers in remote observatories (through video-conferencing), as well as members of nearby amateur astronomy groups. The Eagle Hill Institute has many years of experiences in developing well-integrated programs, such as the continuum of programs we are proposing in astronomy.

The Astronomy Resource Center Center will have two separate buildings: a multi-level observation tower with a planetarium and teaching facilities, and a separate domed observatory with a large telescope and independent study facilities. From the Tower's upper level, one will have a magnificent 360 degree unobstructed view of the celestial sphere and into deep Space. To the South, one will have an optimal view into the heart of the Milky Way over the ocean horizon of the Maine coast. To the North, on clear evenings, one will have a chance to see the Aurora Borealis, or Northern Lights. One will be able to watch the rising and settings of our Sun and Moon and the steady rotations of the constellations and how they rise and set over the horizons over the course of a year. Because of its grand setting on the summit of Dyer Neck peninsula, the Tower will serve as a unique and inspirational teaching facility for naked eye observations.

The memorable experience of learning about astronomy under an open sky with an unobstructed 360 degree view will be enhanced by the use of portable on-site intermediate level telescopes on the Tower's upper level deck, but guests will also be able to look forward to more detailed views through the eventual larger telescope in the domed observatory and to learn about the research efforts of astronomers who will be operating it. In developing our plans for the use of on-site telescopes, we are taking into consideration the somewhat challenging weather conditions in Maine and are developing partnership arrangements for computer access to advanced telescopes outside of Maine where there are optimal viewing conditions. Thus, even on rainy or snowy evenings, one will be able to use a telescope, even though it may be located in Spain, Chile, Arizona, or Hawaii.

Observatories and planetaria are popular destinations for the general public and visiting groups of students. We are mindful of the fact that the Eagle Hill Astronomy Resource Center will be especially

important for eastern Maine, where schools need opportunities to offer interesting and meaningful programs in the sciences. We are making special efforts to encourage local teachers and students to become actively engaged in learning about astronomy.

While it will take some time to build the Eagle Hill Astronomy Resource Center, we are already furthering its missions by offering our first class in astronomy during the fall and winter of 2012, plus public lecture programs and special event viewing evenings. These will each help to build an interest in the Center.

We welcome your comments and questions.