

# Dark Skies Rangers



## DARK SKIES RANGERS MISSION

“Create awareness among local communities and authorities regarding light pollution and its hazards”

Here are the ways a student can become a Dark Skies Ranger:

### TITLE: DARK SKIES AWARENESS EXPLORER

Promote a session for students in your school and local community on the importance of shielding lights:

- ★ Light Shielding – An interactive demonstration and Powerpoint presentation on what light pollution is, how it affects the visibility of stars, its importance and relevance to your life.

### TITLE: DARK SKIES AWARENESS AUDITOR

Make an inventory of the energy efficiency of outdoor lighting at your school:

- ★ Taking Inventory – How energy efficient is the outdoor lighting at your school? Determine the good, the bad and the ugly in outdoor lighting and how much energy and money is lost to poor lighting. Evaluate the effects of light pollution at the school to suggest economical, energy efficient and task-effective improvements.



**TITLE: DARK SKIES AWARENESS PROTECTOR**

Engage students in activities on how light pollution effects wildlife and other issues:

- ★ Promote a Student Symposium – Older students role-play key people and research on important dark skies issues such as the impact on wildlife, human health, personal and municipal budgets and government regulations. They detail possible solutions and inform the public via methods like YouTube
- ★ Promote hands-on activities for younger kids: Turtle Hatching – Younger students role-play turtles hatching on a beach at night to experience the affect too much lighting has on their survival. There is also a hands-on activity with insects.

**TITLE: DARK SKIES AWARENESS ACTIVIST**

Prepare for the star-hunting campaigns by participating in these activities:

- ★ Monitoring Your Night Sky – Activities introduce concepts and skills such as how to find a constellation, what is a magnitude, and how these concepts and skills help to measure night sky brightness.

Engage in a program to determine the night sky brightness in your town (and to convince schools in the same region to participate) by joining in 1 of 3 global star-hunting campaigns:

- ★ “GLOBE at Night”, “The Great World Wide Star Count” and “How Many Stars” – By participating in any of these 3 star-hunting programs offered at different times of the year, students join people all around the globe in collecting data on the night sky conditions in their community and contribute to a worldwide database on light pollution. For older students, as an optional “Going Further”, the data can be analyzed using various online tools.

**TITLE: DARK SKIES AWARENESS RANGER**

Present the results to local authorities or school community as a presentation, a journal, etc

- ★ Become a Dark Skies Ranger by presenting results from the Auditor, Protector or Activist categories to a school board, city council or at a Family Science Night or student conference within or between schools.

All participants will receive certificates corresponding to the chosen activity. For instance, a student promoting Dark Skies Awareness Activist activities will be entitled to a Dark Skies Awareness Activist certificate.

In order to receive the certificate, reports of the promoted activity, issued by the student school, have to be submitted to Rosa Doran ([info@galileoteachers.org](mailto:info@galileoteachers.org)) and/or Constance Walker ([cwalker@noao.edu](mailto:cwalker@noao.edu))