

SUGGESTED MATERIALS

- telescopes
- binoculars
- green laser (*see safety notes)
- orange traffic cones
- first-aid kit
- step stool (as an aid while viewing)
- star charts
- red balloons (trimmed)
- light shielding demo
- GLOBE at Night data collection materials
- hot beverage area
- anything else you may need

TELESCOPE ETIQUETTE

If possible, gather groups as they arrive for a briefing so they know what to expect, feel comfortable and safe and to protect equipment.

- No white light in the telescope viewing area. This includes flashlights, cell phones and flash photos.
 - » Pass out trimmed red balloons
 - » Teach about dark adaptation
 - » Light shielding demo (see kit)
- Closely supervise your children.
- Any other rules.
 - » No smoking, no alcohol, no running, no pets (even on a leash), no use of aerosol sprays (bug spray, etc.) near telescopes.

TIPS FOR HOSTING A SUCCESSFUL SKYWATCHING SESSION

SETTING UP YOUR SITE

- Choose a viewing area away from unshielded lights. Turn off outdoor lights where possible.
- Try to shield the viewing area from headlights. Traffic cones can help you block off areas from parking.
- Minimize tripping hazards on the way to and at the viewing area.
- **Consider marking telescopes** with glow-in-thedark tape on the tripod legs, red lights mounted under the telescope or small red glowsticks.
- Consider marking the path to the viewing area with red light, glow sticks or solar lights. Or escort visitors with a red flashlight.
- Set up telescopes in a way that allows for lines of people.
- Consider a constellation tour or other activities away from the telescopes to help reduce crowding.
- Consider a way to identify telescope operators and staff in the dark e.g., small red light hung around the neck.
- Consider having a small orientation table marked with red light that has star charts and other materials.

ACTIVITY IDEAS

- Start with a formal or informal program:
 - » Preview what you expect to see in the sky that night
 - » How to use star charts
 - » How to collect and report data for GLOBE at Night (practice yourself first!)
 - » Light shielding demo (see kit)
 - » Offer red balloons to visitors with white lights. Trim off the balloon neck, then fit the rest over the light.
 - » End with a briefing on telescope etiquette
- Viewing through telescopes and binoculars
- Lead visitors in collecting data for GLOBE at Night (at least 1 hour after sunset). Submit data onsite using www.globeatnight.org/webapp
- Constellation tour or star stories

GET THE MOST FROM THE VIEWING EXPERIENCE

Let people know where they will find the telescopes, how many there are and what kinds of objects they will be able to view that night. Tell them they will be looking at a variety of objects throughout the evening. You may want to introduce telescope operators.

- Are there parents with young children? Parents should look through the telescope <u>first</u> to know what to look for when helping their children.
- Touch the telescope only with the operator's permission. Visitors should resist the urge to grab hold of the eyepiece. If telescope operators have a chair or step stool next to the scope, they can use a red light to direct visitors to place their hands on the stool (pointing at the stool) and then to "look here" (pointing at the eyepiece).
- Does a visitor wear glasses? Have them try looking through the telescope with their glasses on first. If the image seems blurrier than it should be, they should ask the telescope operator for help focusing.
- Encourage visitors to ask questions! Visitors should speak up if they cannot see anything through the telescope (the object may no longer be in view) or if they are not sure what they are looking at. Once they are finished looking through the eyepiece, they should step aside for any further questions to keep the line moving.
- Telescope operators should give visitors meaningful information about the objects they are looking at. For example, "This is the Orion Nebula, a place where stars are forming right now," rather than, "This is M42."

SAFETY NOTES ABOUT GREEN LASERS

If you choose to use a green laser, be mindful of safety! Lasers can damage eyesight and cause problems for aircraft.

- Use only lasers <5 milliwatts.
- Choose a laser that requires you to continuously depress the button to operate it. Other lasers can stay on when you don't intend them to.
- Keep the laser on a lanyard around your neck or attached to you in some way. Do not allow others to use it.
- Never point a green laser at or near a person, vehicle, wildlife, refective material (such as a road sign) or aircraft even if it seems to be at a great distance.
- Avoid aiming the laser close to the horizon.
- When leading a star tour, place yourself in front of your audience, not behind them. Consider using a small step to place yourself higher than the group.
- Circle any object in the sky that you are not absolutely positive is a star, rather than holding the laser on it, in case the "star" is really an airplane.
- Use the laser sparingly! As soon as you have pointed out an object in the sky, stop using the laser until it is time to point out the next object.
- Prohibit the general public from using green lasers at your event.