

# Sharing the wonder

SIMON PERKS considers some of the best ways in which the spectacle of the night skies can be brought to a wider audience.



*The Baker Street Irregular Astronomers in action. Credit: The Baker Street Irregular Astronomers.*

FROM the beginning of time, we have stared at the night sky with awe. The Moon, planets and stars have long held us in their thrall. As astronomers, the mysteries of the Universe lie within our grasp. But how can we share these marvels—and our enthusiasm for them—with those around us? Simple: Just get them to look through a telescope. But what makes for a truly memorable astronomy outreach event?

## Location, location, location

A good location is vital. Firstly, it needs to be safe for those running and attending the event. So avoid anywhere with uneven ground or other potential hazards. To allow good observing, the venue needs to provide a decent view of the sky. It needs to have as little ambient light as possible. "A southern horizon view is usually best," says Peggy Walker from the Broken Arrow Sidewalk Astronomers. "This allows people to see the Moon and planets." Think also about how easy it will be for people to get there. Close to cities and towns is usually better than deep in the countryside.

If you're looking to do something less formal, just take your telescope and, in the words of the late John Dobson, "go to where the people are." Ralph Wilkins from the Baker Street Irregular Astronomers Places recommends places where there will be lots of foot traffic, such as outside a theatre or other place where people go out for the evening.

Wherever you plan to hold your event, though, make sure that you check it out beforehand and that it is suitable for your needs.

## Getting the timing right

The best times of year for astronomy events are usually autumn and spring, when the skies are dark early but it's not too cold. In most parts of the UK, though, winter temperatures will normally be bearable, too, which provides a good observing window from October to March. Remind visitors to bring warm clothing with them, though.

Clearly, observing the stars and planets will be easiest at night. But not all nights are created equal. "The best time to hold a star party is the first quarter Moon," says Peggy Walker. Fellow sidewalk astronomer, and founder of the International Sidewalk Astronomy Night, Donna Smith agrees. "John Dobson always said astronomers are allergic to the Moon," she says, "but the public isn't. And in its early phases, the Moon is not yet so bright that it outshines everything else."

Selecting an evening when the sky will be clear, however, is somewhat less straightforward. The easiest approach is to choose a date and hope for clear skies. Needless to say, this can end badly. "Fixed dates just don't work," says Allan McCarthy from the Bristol Astronomical Society. "To choose one date and to get a clear night is amazing." Allan suggests choosing a period of several days and going with the first evening that has a clear forecast.

Donna Smith adopts a similar method, choosing a primary date with a couple of back-ups. Both of these approaches mean, though, that you need someone to make the 'go / no go' decision and a way of

communicating it to people coming to the event. This could be by email or through a website or social media. "If this is too complicated," says Smith, "just run a regular event each month from autumn to spring. That way, if one event suffers from bad weather, it's never too long until the next one."

## 'Scopes and volunteers

When people come to an astronomy event they are expecting telescopes. But which telescopes work best? "There's not much better than a Schmidt-Cassegrain telescope on an alt-azimuth mount with a GoTo system," says Allan McCarthy. "The eyepiece is at the right height and you can find objects quickly."

Donna Smith agrees that GoTo systems have their advantages, but emphasises that all types of telescope can work well. "I use a Dobsonian," she says. "My favourite is an 8 inch. It's easy to use and is the right height for kids with little need for a step ladder."

"Variety can also be helpful. It shows people the range of 'scopes that are available," says Ralph Wilkins, who also organises AstroCamp and co-hosts the free monthly Awesome Astronomy podcast. And it allows them to try out different scopes, from beginner models to more advanced systems.

How many 'scopes you need will depend on the number of visitors. "You can run an impromptu 'sidewalk' session with just one telescope," says Donna Smith, "which can handle a couple of hundred people over the course of an evening. But if you're

running an organised event, more scopes will be necessary."

Allan McCarthy proposes a ratio of one telescope for every eight or ten visitors. "But as a general rule," says Ralph Wilkins, "if you have five or more 'scopes, then everyone will be happy. Be aware, though, that the bigger the telescope, the longer the queue!"

### Choose your targets

What you choose to look at will depend on the time of year and what's going on in the heavens. "The Moon gets by far the best response from members of the public," says Donna Smith. "The planets also put on a good show," notes Allan McCarthy, "especially Saturn and Jupiter, the former with its rings and the latter with its moons and belts."

The most prominent constellations likewise always prove of interest and can help beginners to locate individual stars, planets and other objects. And double stars, such as Albireo and the 'Double Double' (Epsilon Lyrae), can prove similarly fascinating. In terms of deep sky objects, popular targets include the Great Globular Cluster in Hercules (M13), the Andromeda Galaxy (M31), the Orion Nebula (M42), the Ring Nebula (M57), and Bode's Galaxy and the Cigar Galaxy (M81 and M82). "The Messiers are usually awesome," says Peggy Walker. "The International Space Station raises excitement levels, too, as do satellites making their way across the sky."

"When setting up your telescopes," says

Ralph Wilkins, "try to make sure that people see a wide range of objects. You don't want all the telescopes to be pointing at the same thing." Allan McCarthy suggests roughly one target per operator per hour of observing. But work with the operators to choose targets that are appropriate for their telescopes and their levels of experience. And be flexible—let operators take requests if there's something a visitor would really like to see.

### Managing the event

As things get under way, you'll need someone in charge who isn't tied to a telescope. They can welcome visitors as they arrive, perhaps give a short introductory talk about the night sky and make sure that everything runs smoothly. Plan for something to go wrong, though, because it probably will. And remember that it'll be dark!

Recognise also that a public outreach event isn't about astronomers looking through their telescopes. It's about getting people involved. "You have to be mindful of your newbies," says Peggy Walker. So have people on hand to interact with visitors. "Having a few volunteers to engage with people and talk to them is helpful," agrees Allan McCarthy.

Drawing the crowds, though, will require publicity. And this isn't easy, admits Ralph Wilkins. Paid advertising is usually prohibitively expensive, so social media and word of mouth are the most common ways of promoting events. Flyers in local community venues, emails to local schools

and newspapers and mentions on local radio can also help to drum up support. "And if possible," says Allan McCarthy, who organises events with the National Trust, "team up with an organisation that has its own communications networks."

You should also secure appropriate public liability insurance for your event, unless this is covered by the venue where you're holding it. If you are part of an astronomical society, this can be obtained cheaply through the Federation of Astronomical Societies. Otherwise you'll need to purchase it directly from an insurer. You'll also need permission from the site's owner, even if this is the local council (the latter, in my experience, are usually much more helpful than you would expect).

### Final thoughts

Once people have had a great time at your event, make sure that they have something to take away. A small printed map of the night sky is always valued, and photos taken with a smartphone held up to an eyepiece will be a talking point for weeks to come. Furthermore, a brochure or events list can help to promote your astronomical society or future events.

Oh, and don't forget to relax. Keep it welcoming, friendly and informal. It's supposed to be fun. You want people to enjoy themselves. And you want them to keep coming back for more. Which, after that first eager glance through a telescope, they probably will.

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*A sidewalk astronomy session wows the crowds on London's South Bank. Credit: Philip Stobbart.*

