Abstract

Dark Sky Scotland (DSS) 2006-2008 is a nationwide programme of public and educational astronomy events. It demonstrates successful national partnerships with non-astronomy organisations and effective ways of delivering events in remote rural communities. DSS is looking for international partners for IYA2009.

Introduction

Dark Sky Scotland\(^1\), which runs from October 2006 to March 2008, is a nationwide programme of public and educational astronomy events. It is the first such programme in Scotland and perhaps the first time any country in the world has developed a national programme of events around its dark skies. As a case study it demonstrates success in forming national partnerships with organisations that are not normally involved with astronomy and also ways of running events that have a lasting impact in rural communities.

Scotland has approximately 10% of the population of the UK and some 33% of the land area. Consequently, some of its regions have among the lowest population densities in Europe. This means it has it has some of the largest areas of dark skies in western Europe. It also means that there is a nationally recognised need to provide support for, and services to, remote rural communities.

Dark Sky Scotland harnesses the national asset of Scotland’s dark skies, bringing together a range of partners to deliver astronomy events in these rural communities. The steering group partners are the Royal Observatory Edinburgh, Forestry Commission Scotland, Institute of Physics Scotland, Careers Scotland and Glasgow Science Centre. The main funding partners are the Office of the Chief Scientific Adviser to Scotland, Highlands and Islands Enterprise and the UK Science and Technology Facilities Council. Additional funding is provided by some of the local organisations that host the Dark Sky events.

These partners provide an essential mix of contributions to the project including venues, event marketing, astronomy communication and science education. The Forestry Commission Scotland (FCS) is a particularly interesting contributor to the project because, as a forestry agency, it has no specific remit to promote astronomy or even science more generally. FCS is Scotland’s largest landowner and therefore a “custodian” of much of the country’s dark skies. Since the 1990s, FCS has placed a greater emphasis on its work to promote the environmental and social benefits of its forests. In the terminology of FCS, astronomy is a “non-timber forest product”. FCS has been contributing to the hosting, organising and marketing of DSS events because of the

\(^1\) www.darkskyscotland.org.uk
social and tourism benefits of these events to the communities near its forests. At a simpler level, FCS staff have been highly motivated by the opportunity to play a role in helping to run popular and inspirational astronomy activities.

During the eighteen months of the project, the DSS will run some 40 events involving over 60 organisations. It has trained some 60 research astronomers, students, amateur astronomers, teachers and science communicators to run these events.

So what do these Dark Sky events entail? In particular, in what way are they effective in rural communities? The format of the events varies from location to location but a typical event follows this format:

**Friday**
- **am** Dark Sky team travels to the venue.
- **pm** Training workshop for teachers on observing with naked eye and robotic telescopes.
- **evening** Family stargazing session.

**Saturday**
- **am** Training workshop for tourism and community organisations on naked eye observing.
- **pm** Astro-fun for families including Starlab planetarium, comet-making demonstration, rocket-making.
- **evening** Family stargazing session.

The Dark Sky team returns home on Sunday. Given the often cloudy Scottish weather, there are plenty of indoor activities and the events are marketed as “weatherproof”.

This format means that the event reaches all parts of the community, creating a buzz during the weekend. In particular, through the training workshops, it leaves a legacy among teachers, tourism organisations and other community groups inspiring them to run astronomy activities in the future. This is important because it is not financially viable for the Dark Sky team to visit these communities on a regular basis in the future. So the event must make a make a big and enduring impact.

**Ideas for 2009**

The experiences of DSS offer a number of ideas for other countries planning for International Year of Astronomy 2009. Firstly, the successful partnership with Forestry Commission Scotland suggests that large land managers and conservation agencies in other countries might form national partnerships to host and support inspirational astronomy events. DSS will continue to run in Scotland and it is also looking for links with other parts of the UK and internationally. For example, 2009 is International Year of Homecoming for Scots when there will be special programmes to make links with the Scottish diaspora around the world. Meanwhile, the Royal Observatory Edinburgh manages the OPTICON network for European astronomers. Both these programmes may provide opportunities to establish links with international Dark Sky programmes in 2009. In practical terms, DSS will be looking to run a demonstration event for international partners – probably in 2008 – so that they can see a DSS event in action and take home ideas that will work in their own countries.