

# **Jasper National Park Dark Sky Preserve**

# What is a Dark Sky Preserve?

Dark Sky Preserves (DSP) are areas designated by the Royal **Astronomical Society of Canada** (RASC) to protect nocturnal wildlife habitat and quality night sky viewing. As a DSP, Jasper National Park will demonstrate leadership in responsible lighting, designate public observation sites and work with partners to develop new and innovative night sky programming. There are currently eleven sites in Canada that have received DSP designation<sup>1</sup>. Eight of these are in National Parks or National Historic Sites.



# Why Jasper?

Jasper is an ideal park to be designated the first DSP in the Rocky Mountains for a number of reasons:

97% of the 11,000km2 park is a designated wilderness area, free of light pollution, yet roads and trails provide easy access to excellent year-round star gazing sites. Many of the valleys in much of Jasper are broad and U-shaped, providing good views of the night skies.

Most of Jasper National Park has excellent dark skies (sky brightness 0.01-.11). The southern part of the park boasts truly dark skies (sky brightness <0.01). This is one of the only areas in southwestern Canada with exceptional darkness (Figure 1), yet is accessible by year-round road and offers.

The park has excellent all season facilities for visitors with a wide range of accommodations and camping opportunities.

Parks Canada offers an extensive interpretive program, including an astronomy program. Moreover, the park hosts a public outreach and education facility, the Palisades Stewardship Education Centre, catering to national and international school and youth groups. The Palisades Centre presents an astronomy program

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<sup>&</sup>lt;sup>1</sup> Jasper NP and Beaver Hills
 (includes Elk Island National
 Park (NP)) in Alberta; Grasslands
 NP in Saskatchewan; Cypress
 Hills in Alberta/Saskatchewan
 9includes Fort Walsh National
 Historic Site (NHS)), Bruce
 Peninsula NP, Point Peelee NP,
 Torrance Barrens, and Gordon's
 Park in Ontario; Kouchibouguac
 NP and Mount Carleton
 Provincial Park in New
 Brunswick; Kejimkujik NP and
 NHS in Nova Scotia.

to school groups. Both the Palisades Centre and the interpretive team own telescopes and other tools to support their programming.

There are several National Historic Sites within the borders of Jasper National Park. One of these, Athabasca Pass National Historic Site, is connected to David Thompson, one of Canada's most renowned map makers who observed the night skies extensively for navigation and map making purposes.

The Municipality of Jasper, which lies wholly within the DSP, aims to pursue an application to the International Dark-Sky Association to obtain dark sky community status.

The local Destination
Management Organization,
Tourism Jasper, is focusing on
spring, fall and winter activities,
as well as learning
opportunities in its promotions.
The creation of a DSP and
development of stargazing
opportunities is perfectly suited
to their marketing and product
development strategy.

The Jasper Park Chamber of Commerce considers the DSP as an excellent opportunity for local businesses to create a unique experience not available anywhere in the Rockies.

# The Jasper DSP

The Jasper DSP is currently the world's largest DSP in the world, and the only DSP in Canada with a town wholly within the preserve.

The Jasper DSP is made up of a DSP core area, and a buffer area. The **Core Area** is free of light pollution and includes the bulk of the wilderness zone of Jasper National Park and parts of the natural environment and outdoor recreation zones. It has the highest quality night skies.

The **Buffer Area** is comprised of the areas that contain the town of Jasper and the park's facilities. Parks Canada and its partners will strive to pursue responsible lighting strategies within the buffer area.

# Responsible lighting

The designation does not require lights within the preserve to be turned off, but rather it encourages Parks Canada, businesses and residents of the park to adopt responsible lighting strategies over time. This includes using shielded lights that point downward, adding timers or motion sensors when appropriate, and using the right amount of light to illuminate an area.

## Observation sites

The Park is promoting several **Public Observation Sites** that have excellent opportunities for star gazing. Many of these sites offer camping and accommodation on-site or nearby. The two main public sites are:

**Pyramid Island**. Within 15 minustes from Jasper, this magical place offers excellent dark skies with a scenic lake and Pyramid Mountain as backdrop.

#### Athabasca Glacier.

Experience the darkest skies in the park in a spectacular alpine environment, yet within a kilometre of a hotel and two campgrounds.

The park also offers several excellent observation sites for groups and events. These are not normally accessible to the public after dark, but can be reserved for use by star gazing groups or events.

## Contact

### **Rogier Gruys**

Visitor Experience Product Development Specialist Jasper National Park rogier.gruys@pc.gc.ca 780-820-2107

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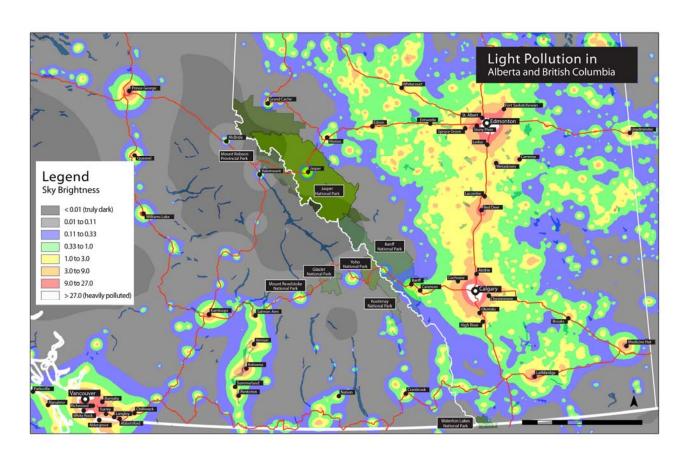


Figure 1 Map of light pollution in Alberta and BC.

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# Resources

## Information about observing the night skies in Jasper

www.jasperdarksky.org

**News release** 

http://www.pc.gc.ca/apps/cp-nr/release e.asp?id=1697&andor1=nr

## **Canadian Geographic article**

http://canadiangeographic.ca/magazine/apr11/astronomy\_jasper\_national\_park.asp

## **Newspaper article**

http://fitzhugh.ca/news/3116-jasper-national-park-designated-a-dark-sky-preserve

#### **Further resources**

http://www.jasperdarksky.org/lighting-resources

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