

A A A E F D E E A

Agents of deterioration are factors that can damage or destroy works of art. By learning about them, we can come up with ways to recognise and slow down damage as well as treat damage that has already happened. Light is an agent of deterioration. It's a tricky one, because we need light to see a work of art, but light can also damage certain objects! Some artworks, like photographs and watercolours are very sensitive to light, while others like stone sculptures aren't very sensitive.

What is light?

Light is a type of electromagnetic radiation that our eye can see. Light can come from the sun, fire and human-made light bulbs. There are other types of radiation at different wavelengths like ultraviolet and infrared that come from these same sources and damage artworks. However, we can't see these types of radiation.

How do we measure light?

We call the amount of light falling on a surface "illuminance" or "lux level" or short. Total darkness is 0 lux, while full sun is 100,000 lux. In an art museum like Agnes Etherington Art Centre, we aim for a lux level of 50–150 depending on what's on display.

How do we minimize light damage to artworks?

There are many ways art conservators and museum staff can minimize light damage. The simplest is to reduce the amount of light falling on a surface (lux) and the amount of time an artwork is exposed to light. We do this by keeping artworks in the dark when they're not on display, and when they are on display, keeping the light in the galleries dim and making sure we have window treatments like solar screens, blinds and curtains.

near shade museum model

QUESTION

Want to learn more about how light affects different types of objects? Check out the Canadian Conservation Institute's Light Damage Calculator.

ANSWER

This question can be answered by conducting an experiment! How does low strength light affect an artwork on paper over time?

Examine the artwork *Lychnis and Larkspur* by Daniel Fowler (page 3). Fill out a condition report. It should be "excellent" as it's a freshly printed image.

Find a very sunny spot in your house, like a window ledge. Cover the left side of the image so the sun doesn't reach this side. Keep the right side of the image uncovered so it stays in the sunny spot and don't move it. You'll check back in a month.

QUESTION

What
pp
mag
Re



Works on Paper
 CONDITION REPORT # _____

Accession Number:	B@@DB	
Object Name:	Lychnis and Larkspur	
Maker:	' ! -)%". 4 #0	
Date:	† - * - . 4 - \$! 2%	
Materials:	ž ! 20# . + 30. - /! /%0	
Measurements:	CC9H5BC9 #, < Q')-! +7BB9D5AF9 #, 0% / ## =	
Provenance or Credit Line:	fi3G#! 1%7' (! - #/++ Of)#! C\$1. - ~ % . Q! + "3- \$! - \$ ž) - 2 Q. , ! 2#(-) ' ' 0 - 27AI GG	

Overall Condition				
m fi . 0	m "!)0	m . . . \$	m Ž%06' . . \$	m °5#/%% 2

Condition Overview
° 9 ,)-! 2 . - ~ %2 . \$ < 4)2 -! *%\$ %6% ,)#0 1%2)%G . = #/± }
±