EVALUATION OF OZONE DAMAGE TO VEGETATION ON THE LYE BROOK WILDERNESS IN 1992

APRIL 1993

Prepared By: James T. O'Brien, USDA Forest Service Forest Health Protection, Durham Field Office **UNITED STATES DEPARTMENT OF AGRICULTURE**

Evaluation of Ozone Damage to Vegetation on the Lye Brook Wilderness in 1992

Forest Service

Survey Report

Northeastern Area

April 1993

Prepared by:

James T. O'Brien, Plant Pathologist, Forest Health Protection, P.O. Box 640, Durham,

NH 03824

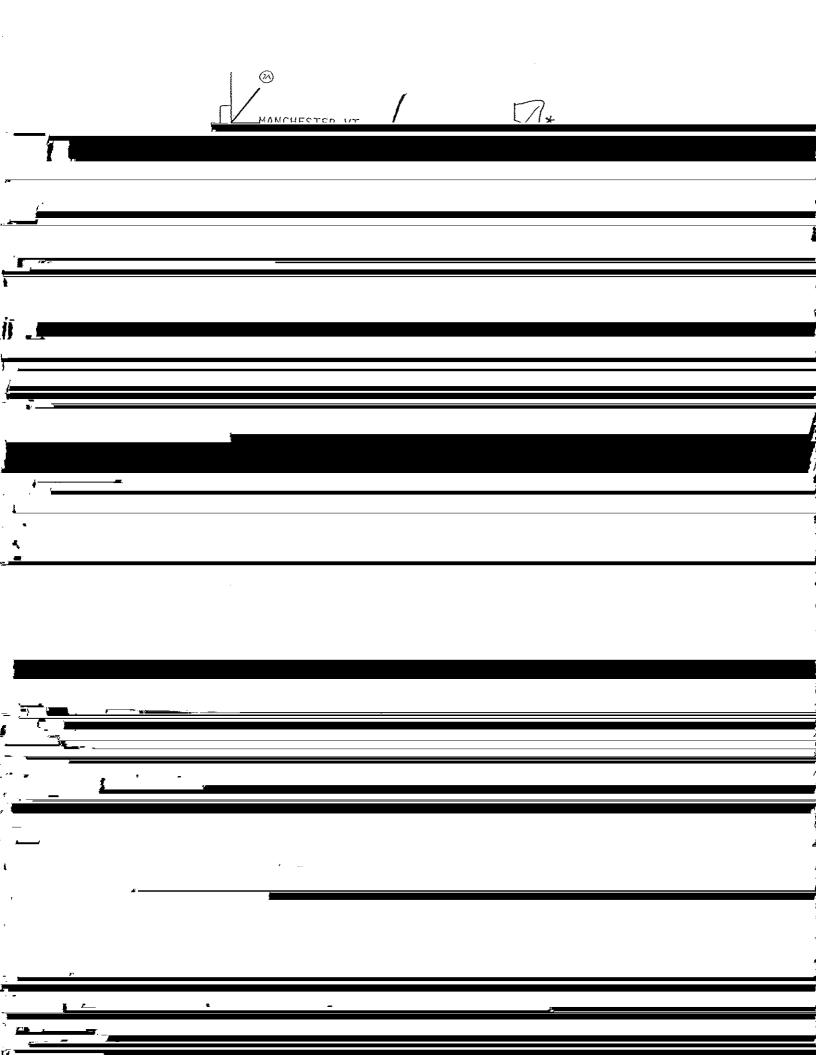
HIGHLIGHTS

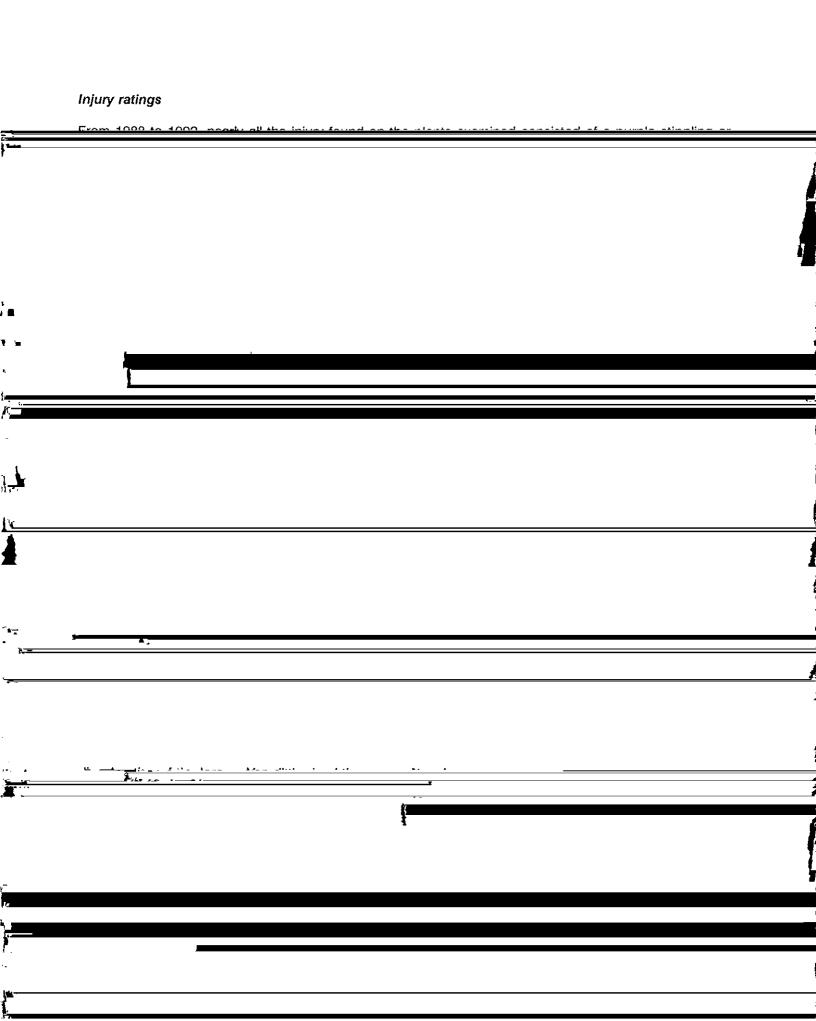
Ozene appentrations in the vicinity of the Brook Wilderness were low on the everens

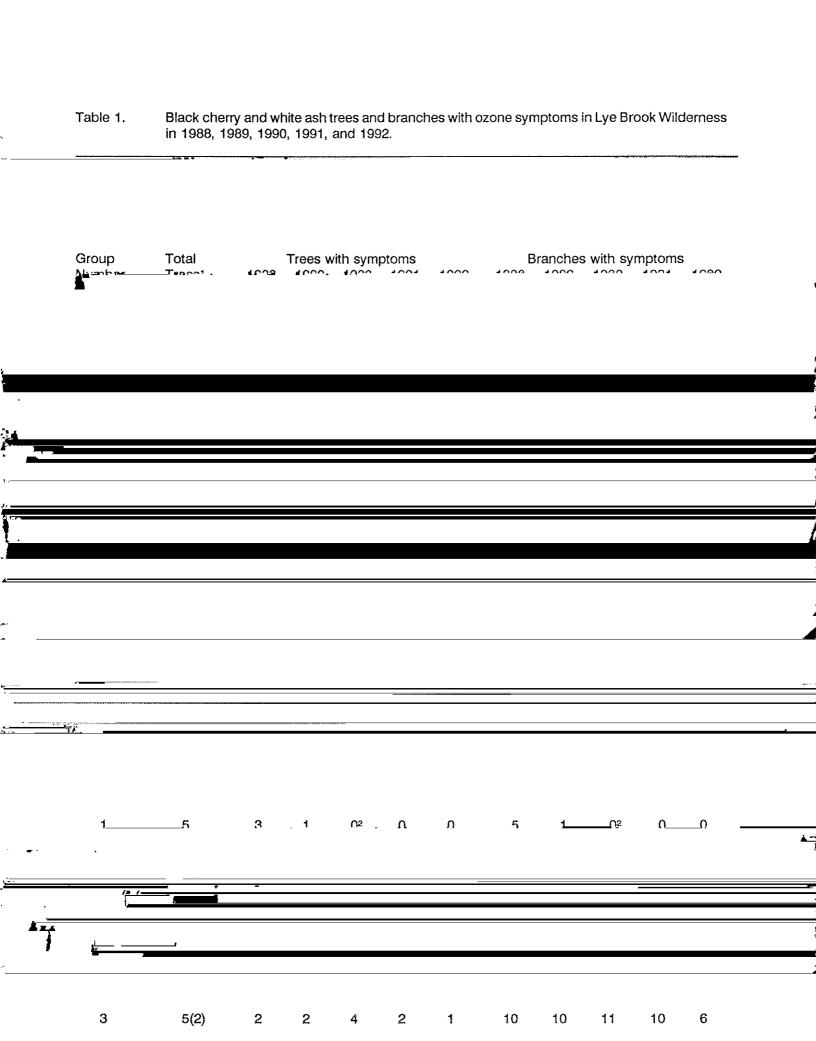
INTRODUCTION

	of "Class I" wilderness areas from	m the adverse effects of a	ir pollution. In 1987, pers	onnel of the National Forest	· ·
			* ***********************************		
	1				
	_				
_					
•					

of the Lye Brook Wilderness in Vermont. Since then the Wilderness has been surveyed annually for symptoms of ozone injury. Herein is a report of the 1992 findings, and comparisons with the findings of previous years.

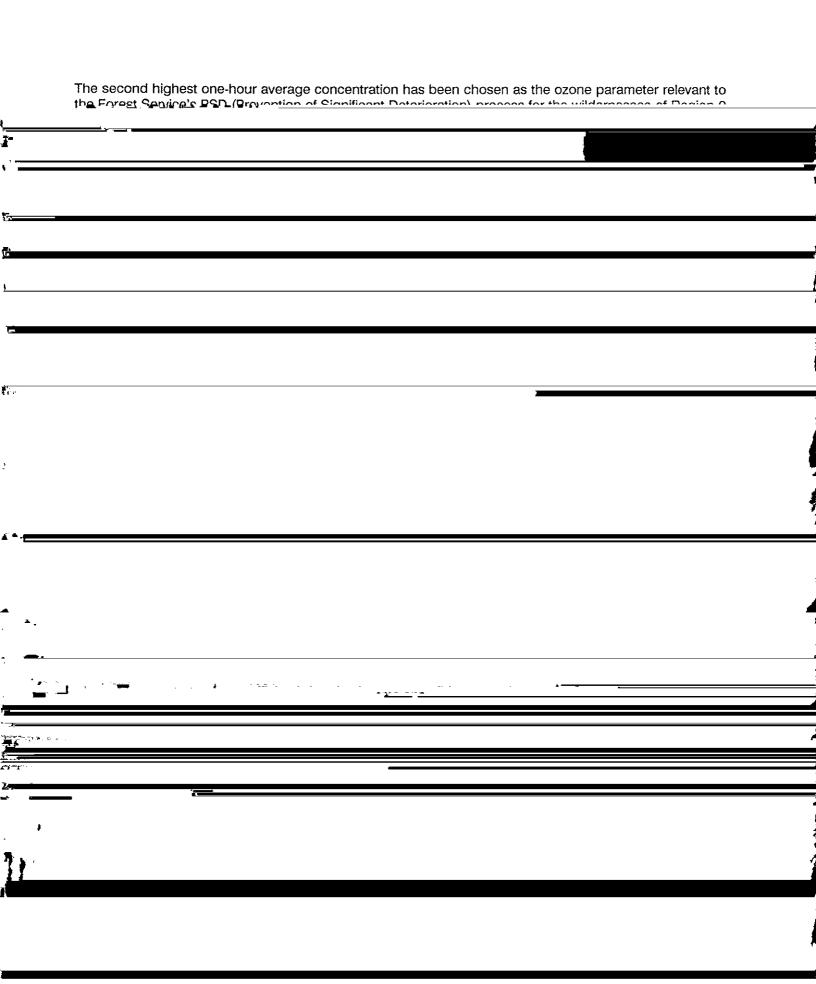






Ozone concentrations in 1992

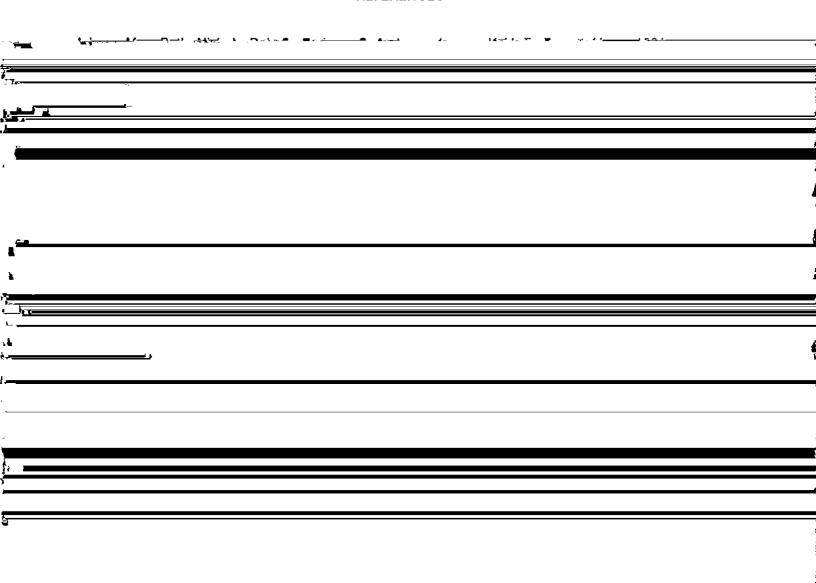
	shows that for most of the				
<u>A</u> s	•				
statemer	t to include 1987, the firs	st full vear in which mo	nitoring was complete	ed by the State of Ver	mont.
	ر المستورية على المستورية على الاستورية إلى المستورية إلى المستورية إلى المستورية إلى المستورية إلى				



RECOMMENDATIONS

- (1) To discern long term trends in ozone concentrations, the ozone concentration monitoring should be continued indefinitely. The Forest Service monitor on Mt. Equinox is more relevant to the Wilderness than the State monitor at Bennington because it is closer, both geographically and in elevation. In 1992, the Mt. Equinox monitor was more indicative of the higher concentrations to which most of the Wilderness was exposed. Apparently, in some years, the differences in elevation between the locations of the monitors leads to marked differences in concentrations. Nevertheless, the Bennington monitor is of considerable value, particularly for May data, as the weather may make it difficult to install the Mt. Equinox monitor in May.
- (2) The vegetation surveys too should be continued, at least for several more years. Most of what insight we have as to the effect of ozone on the plants came only after several years of surveying.

REFERENCES



APPENDIX

				1 11 1	دلا ما میروند. در	manadad kirkha Basalas	
				š,-			
11							
Ŧ,							
<u> </u>							
·							
.							
1							
	(-						
•							
· ,							
-				<u> </u>			
<u>.</u>	•						
	‡2n <u>-</u> 0*	nd M. Engenoveme	anitar <u>a. D</u> awa in u	uhlah thara wara na	or incomplete <u>recordiir</u>	nas at either monitor were	
,	7/						