Natural Resource Network

Connecting Research, Teaching and Outreach

Extent of Prescribed Fire Use
in New Hampshire
Updated Tables, 2014-2017

NH | **Extension**

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Extent of Prescribed Fire Use in New Hampshire, Updated Tables, 2014-2017

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This publication builds on data collected by Ben Kaufhold, Andrew Fast, and Mark Ducey in 2017. Brooke Benson, a University of New Hampshire student assisted with the project through data collection. The information provided is intended to in increase the prescribed fire statistics record for New Hampshire. Methods and project background are detailed in "Extent of Prescribed Fire Use in New Hampshire."[1]

Prescribed fires were defined as broadcast burns, e.g. "where fire is applied generally to most or all of an area within well-defined boundaries for reduction of fuel hazard, as a resource management treatment, or both."[2] These are fires that require N.H. Category IV fire permits unless in the presence of a N.H. Fire Warden or N.H. Fire Warden's agent. The tables contained herein represent all prescribed fire activity in the state whether a N.H. Category IV fire permit was filed or a N.H. Fire Warden was present.

2016-2017 prescribed fire results reflect survey data from 227 New Hampshire municipalities. Despite the comprehensiveness of the survey, some New Hampshire prescribed fires were not recorded due to lack of records or lack of survey response from municipal fire departments. The accuracy of the data reflect available records and institutional knowledge shared by our local, state and federal prescribed fire partners.

This project could not have been completed without the support of the New Hampshire Prescribed Fire Council and the leadership of New Hampshire's Division of Forests and Lands Forest Protection Bureau.

Table 1: Summary of prescribed burns, 2014-2017

Summary Statistics	Complete Data			
Year	2014	2015	2016	2017
# of burns	82	53	40	35
Acres burned	513.85	366.1	341.5	372.5
Average Ac / burn	6.27	6.91	8.54	10.64
% of total burns	100%	100%	100%	100%
# of towns where burns occurred	50	36	21	23
% of towns where burns occurred	21.3%	15.3%	9.0%	9.8

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[1] Kaufhold, B.T., A.J. Fast, and M. Ducey. 2017. Extent of Prescribed Fire Use in New Hampshire. University of New Hampshire Cooperative Extension, Durham, N.H.

[2] https://www.nwcg.gov/term/glossary/broadcast-burning accessed 7/7/19

Table 2: Summary of prescribed burns by group, 2014-2017

Summary Statistics	Municipal Fire Departments				State Agencies				Federal Agencies				Other			
Year	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
# of burns	34	24	12	15	24	17	15	9	19	7	10	8	5	5	3	3
Acres burned	216.3	113.8	220.5	185.0	39.0	31.4	18.0	7.5	150.1	55	68.0	110.0	108.5	166.0	35.0	70.0
Ac / burn	6.36	4.74	18.38	12.33	1.63	1.85	1.20	0.83	7.90	7.86	6.80	13.75	21.7	33.2	11.67	23.33
% of total burns	41.5%	45.3%	30.0%	42.8%	29.3%	32.1%	37.5%	25.7%	23.5%	13.5%	25.0%	22.9%	6.1%	9.4%	7.5%	8.6%
# of towns where burns occurred	19	24	7	9	17	10	8	5	6	4	5	6	4	5	3	3
% of towns where burns occurred	14.1%	10.2%	3.0%	3.8%	7.3%	4.3%	3.4%	2.1%	2.5%	1.7%	2.1%	2.5%	1.7%	2.1%	1.3%	1.3%

Table 3: Burn objectives by group, 2016 & 2017[3]

Objectives	Complete Data	Municipal Fire Departments	State Agencies	Federal Agencies	Other
Agriculture	8	4	0	1	3
Forestry	3	0	0	2	1
Public Safety[4]	29	12	17	0	0
Biodiversity	20	14	4	0	2
Wildlife	20	0	5	15	0

Table 4: Fuels associated with burn objectives 2016-2017[5]

Objectives/Fuels	Grass	Shrub	Timber Litter	Slash
Agriculture	6	4	0	0
Forestry	0	1	3	2
Public Safety	8	1	17	0
Biodiversity	16	4	4	2
Wildlife	17	7	1	2

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[3] Some respondents indicated multiple primary burn objectives for a single burn.
[4] Public safety includes both fuels reduction and training burns
[5] One survey response indicated unknown fuel type and it not reflect in the table

The Natural Resource Network Reports

The Natural Resource Network presents this material as a part of series of research reports and publications of interest to educators, resource professionals, landowners and the public. Additional copies are available from the University of New Hampshire Cooperative Extension Forestry Information Center, 131 Main Street, Nesmith Hall, Durham, NH 03824, or at our website extension.unh.edu.

The University of New Hampshire Cooperative Extension provides New Hampshire citizens with research-based education and information, enhancing their ability to make informed decisions that strengthen youth and families, sustain natural resources, and improve the economy. We work with an extensive network of partners within the natural resources community.

The mission of the Natural Resources Network is to enhance interaction among the natural resource research, teaching, and outreach communities in New Hampshire by providing an ongoing mechanism for identifying, addressing and communicating natural resource issues.

Natural resource professionals are working toward improved ways to conserve and use the natural resources of New Hampshire. The Natural Resource Network was formed to improve the interaction among researchers and those who provide outreach education in many kinds of programs. Teachers, outreach professionals and resource managers can bring research-based education to diverse audiences. At the same time, those audiences, or consumers, identify issues and needs for educational programs which can be addressed by controlled research. Well informed and knowledgeable professionals, free-flowing exchange of information, an advantageous and gratifying professional environment, and natural resource planning are goals of the Natural Resource Network.