

Coarse Woody Debris in Managed and Unmanaged Forests of Northern Michigan: 2007 Progress Report

Prepared by:

Michael A. Kost, Michigan Natural Features Inventory, Michigan State University Extension
Michael L. Donovan, Michigan Department of Natural Resources, Wildlife Division

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Activities for 2007

Activities for this multi-year study of coarse woody debris in northern Michigan for 2007 included the following:

- 1) conducting analysis of data collected during 2005 and 2006 field seasons,
- 2) writing a report that thoroughly describes the field methods and results of the two years of data analysis (see Weber et al. 2006),
- 3) sampling 34 stands in the northern Lower and Upper Peninsulas for coarse woody debris using all four field methods described in the report (i.e., Circuit Line-intercept, Circuit Strip Plot, Random Line-intercept, and Random Strip Plot) (Table 1), and
- 4) entering all data collected in 2007 into spreadsheets to facilitate future data analysis.

Stand types sampled in 2007 included 23 aspen stands representing four different age classes (20, 40, 60, and 80 years old), 8 managed northern hardwood stands, and 3 Element Occurrences (EOs) of mesic northern forest (i.e., unmanaged northern hardwoods) (see Table 1).

Over the three years of data collection, 121 stands were sampled using the two Circuit sampling methods (i.e., Circuit Line Intercept and Circuit Strip Plot), which included 50 aspen stands, 57 managed northern hardwood stands, and 14 mesic northern forest EOs. All four sampling methods were employed in 59 stands, including 33 aspen stands, 17 managed northern hardwood stands, and 9 EOs (Table 1).

Future Plans

Due to the elimination of funding for 2008, further data analysis has not yet been conducted. Future plans include seeking funding to summarize the three years of data collection to provide land managers with 1) quantitative information on the differences among sampling methods for coarse woody debris and 2) the range of variability in levels of coarse woody debris among various managed and unmanaged forest types

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Literature Cited

Weber, C.R., M.A. Kost, M.L. Donovan, and P.W. Brown. 2007. Coarse Woody Debris in Managed and Unmanaged Forests of Northern Michigan, 2006 Progress Report. Michigan Natural Features Inventory Report No. 2007-06, Lansing, MI. 21 pp.

Table 1. Number of stands sampled for coarse woody debris during 2005, 2006, and 2007 by stand type and sampling method. Stand types include 20, 40, 60, and 80 year old aspen, managed northern hardwoods, and Element Occurrences (EOs) of mesic northern forest (i.e., unmanaged northern hardwoods). Sampling methods include CLI, Circuit Line-intercept; CSP, Circuit Strip Plot; RLI, Random Line-intercept; and RSP, Random Strip Plot

	CLI	CSP	RLI	RSP	Total
2005					
20 yr aspen	3	3	2	0	8
40 yr aspen	3	3	2	0	8
60 yr aspen	3	3	1	0	7
80 yr aspen	3	3	0	0	6
Northern hardwoods	34	34	13	0	81
EOs	0	0	0	0	0
Total 2005	46	46	18	0	110
2006					
20 yr aspen	4	4	3	3	14
40 yr aspen	4	4	3	3	14
60 yr aspen	4	4	3	3	14
80 yr aspen	3	3	1	1	8
northern hardwoods	15	15	9	9	48
EOs	11	11	6	6	34
Total 2006	41	41	25	25	132
2007					
20 yr aspen	6	6	6	6	24
40 yr aspen	7	7	7	7	28
60 yr aspen	5	5	5	5	20
80 yr aspen	5	5	5	5	20
northern hardwoods	8	8	8	8	32
EOs	3	3	3	3	12
Total 2007	34	34	34	34	136
Total					
20 yr aspen	13	13	11	9	46
40 yr aspen	14	14	12	10	50
60 yr aspen	12	12	9	8	41
80 yr aspen	11	11	6	6	34
northern hardwoods	57	57	30	17	161
EO	14	14	9	9	46
Total 2005 to 2007	121	121	77	59	378