

FINAL DRAFT  
FIREMON References

**FIREMON**  
References



ISS .....	2
CF Method .....	3
DE Method .....	4
FL Methods .....	5
LI Method.....	6
PD Method .....	7
PO Method .....	7
RS Method .....	8
SC Method .....	9
TD Method.....	9

FINAL DRAFT  
FIREMON References

ISS

USDA USFS. 1996. ECADS: Ecosystem characterization and description – USER DOCUMENTATION. USDA Forest Service, Northern Region, Ecosystem management program. Missoula, MT. 78 pages.

Hardwick, P., H. Lachowski, R. Griffith, and A. Parsons. 1998. Burned area emergency rehabilitation project: an example of successful technology transfer. In: J.D. Greer, editor, Proceedings of the seventh Forest Service remote sensing applications conference. Nassau Bay, Texas, April 6-April 10, 1998. American Society for Photogrammetry and Remote Sensing, Bethesda, Maryland. Pages 62-72.

Hann, W.E., M.E. Jensen, and R.E. Keane. 1987. Ecosystem Classification Handbook -- Chapter 4 -- ECODATA sampling methods. USDA Forest Service Northern Region Handbook. 144 pgs.

Jensen, M.E., W. Hann, R.E. Keane, J.Caratti, and P.S. Bourgeron. 1993. ECODATA--A multiresource database and analysis system for ecosystem description and evaluation. In: M.E. Jensen and P.S. Bourgeron editors, Eastside Forest Ecosystem Health Assessment, Volume II, Ecosystem Management: Principles and Applications. USDA Forest Service, National Forest System Information Report. pg 249-265.

Keane, R.E., W.J. Hann, and M.E. Jensen. 1990. ECODATA and ECOPAC: analytical tools for integrated resource management. *The Compiler* 8(3):24-37.

Key, C.H. and N.C. Benson, 1999a. A general field method for rating burn severity with extended application to remote sensing. *In review*.

Key, C.H. and N.C. Benson, 1999b. The normalized burn ratio, a Landsat TM radiometric index of burn severity incorporating multi-temporal differencing. *In review*.

USDI National Park Service. 1992. Western Region Fire Monitoring Handbook. USDI National Park Service, Western Region, San Francisco, CA. 89 pages.

Reinhardt, E., R.E. Keane, and J.K. Brown. 1997. First Order Fire Effects Model: FOFEM 4.0 User's Guide. USDA Forest Service General Technical Report INT-GTR-344. 65 pages.

Van Mantgem, P., Schwartz, M., Keifer, B. 2001. Monitoring fire effects for managed burns and wildfires: Coming to terms with pseudoreplication. Natural Areas Journal 21:266-273.

FINAL DRAFT  
FIREMON References

**CF Method**

Bailey, A. W. and C. E. Poulton. 1968. Plant communities and environmental relationships in a portion of the Tillamook Burn, northwest Oregon. *Ecology* 49:1-14.

Barbour, M.G., J. H. Burk, and W. D. Pitts. *Terrestrial Plant Ecology*. 1987. The Benjamin/Cummings Publishing Co. Inc., Pp. 182-208.

Bonham, C. D. 1989. *Measurements for Terrestrial Vegetation*. John Wiley and Sons. New York.

Daubenmire, R. F. 1959. A canopy coverage method. *Northwest Science* 33:43-64.

Elzinga, C. L., D. W. Salzer, J. W. Willoughby. 1998. *Measuring and Monitoring Plant Populations*. BLM Technical Reference 1730-1.

Goldsmith, F. B., C. M. Harrison, and A. J. Morton. 1986. Description and Analysis of Vegetation. In *Methods in Plant Ecology*, Ed. P. D. Moore and S. B. Chapman, Blackwell Scientific Publications, Pp. 437-524.

Greig-Smith, P. *Quantitative Plant Ecology*. 1983. University of California Press. Pp. 1-53.

Hironaka, M. 1985. Frequency approaches to monitor rangeland vegetation. Symp. on use of frequency for rangeland monitoring. William C. Krueger, Chairman. Proc., 38<sup>th</sup> Annual Meeting, Soc. for Range Manag. Feb. 1985. Salt Lake City, UT. Soc. for Range Manage. 84-86.

Hyder, D. N., R. E. Bement, E. E. Remmenga, and C. Terwilliger, Jr. 1965. Frequency sampling of blue gramma range. *J. Range Manage.* 18:90-94.

Jensen, M. E., W. H. Hann, R. E. Keane, J. Caratti, and P. S. Bourgeron. 1994. ECODATA – A multiresource database and analysis system for ecosystem description and analysis. In: Jensen, M. E. and P. S. Bourgeron, eds. *Eastside forest ecosystem health assessment, volume II: Ecosystem management: principles and applications*. General Technical Report GTR-PNW-318. Portland, OR: U. S. Department of Agriculture, Forest Service: 203-216.

Sampling Vegetation Attributes. Interagency Technical Reference. Ed. Bureau of Land Management's National Applied Resource Sciences Center. BLM/RS/ST-96/002+1730. 1996.

FINAL DRAFT  
FIREMON References

**DE Method**

Barbour, M.G., J. H. Burk, and W. D. Pitts. Terrestrial Plant Ecology. 1987. The Benjamin/Cummings Publishing Co. Inc., Pp. 182-208.

Bartlett, M.S. 1948. Determination of plant densities. Nature 162:621.

Bonham, C. D. 1989. Measurements for Terrestrial Vegetation. John Wiley and Sons. New York.

Elzinga, C. L., D. W. Salzer, J. W. Willoughby. 1998. Measuring and Monitoring Plant Populations. BLM Technical Reference 1730-1.

Goldsmith, F. B., C. M. Harrison, and A. J. Morton. 1986. Description and Analysis of Vegetation. In Methods in Plant Ecology, Ed. P. D. Moore and S. B. Chapman, Blackwell Scientific Publications, Pp. 437-524.

Greig-Smith, P. Quantitative Plant Ecology. 1983. University of California Press. Pp. 1-53.

Jensen, M. E., W. H. Hann, R. E. Keane, J. Caratti, and P. S. Bourgeron. 1994. ECODATA – A multiresource database and analysis system for ecosystem description and analysis. In: Jensen, M. E. and P. S. Bourgeron, eds. Eastside forest ecosystem health assessment, volume II: Ecosystem management: principles and applications. General Technical Report GTR-PNW-318. Portland, OR: U. S. Department of Agriculture, Forest Service: 203-216.

Mueller-Dombois, D., and H. Ellenberg. 1974. Aims and Methods of Vegetation Ecology. Wiley, New York, 547 pp.

Pound, P. and F. E. Clements. 1898. A method of determining the abundance of secondary species. Minn. Bot. Stud. 2:19-24.

Sampling Vegetation Attributes. Interagency Technical Reference. Ed. Bureau of Land Management's National Applied Resource Sciences Center. BLM/RS/ST-96/002+1730. 1996.

Van Dyne, G. M., W. G. Vogel, and H. G. Fisser. 1963. Influence of small plot size and shape on range herbage production estimates. Ecology 44:746-759.

FINAL DRAFT  
FIREMON References

## FL Methods

Brown, J. K. 1974. Handbook for inventorying downed woody material. Gen. Tech. Rep. GTR-INT-16. Ogden, UT: Intermountain Forest and Range Experiment Station, Forest Service, U. S. Department of Agriculture; 34 p.

Van Wagner, C. E. 1968. The line intersect method in forest fuel sampling. *Forest Science*. 14:20-26.

Howard, J. O.; Ward, F. R. 1972. Measurement of logging residue – Alternative application of the line intersect method. Res. Note RN-PNW-183. Portland, OR: Pacific Northwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture; 8 p.

Warren, W. G.; Olsen, P. F. 1964. A line intersect technique for assessing logging waste. *Forest Science*. 10:267-276.

Brown, J. K. 1971. A planar intersect method for sampling fuel volume and surface area. *Forest Science*. 17: 96-102.

Brown, J. K., Roussopoulos, P. J. 1974. Eliminating the biases in the planar intersect method for estimating volumes of small fuels. *Forest Science*. 20: 350-356.

Pickford, S. G., Hazard, J. W. 1978. Simulation studies in the line intersect sampling of forest residue. *Forest Science*. 24: 469-483.

Van Wagner, C. E.; Wilson, A. L. 1976. Diameter measurements in the line transect method. *Forest Science*. 22: 230-232.

Maser, C.; Anderson, R. G.; Cromack, K.; Williams, J. T.; Martin, R. E. 1979 Dead and down woody material. In: *Wildlife habitats in managed forests: the Blue Mountains of Oregon and Washington*. Agric. Handb. 553. Washington, D. C.: U.S. Department of Agriculture; 78-95.

Maser, C.; Tarrant, R. F.; Trappe, J. M.; Franklin, J. F. 1988. From the forest to the sea: a story of fallen trees. Gen. Tech. Rep. PNW-GTR-229. Portland, OR: Pacific Northwest Research Station, Forest Service, U.S. Department of Agriculture; 153 p.

Harmon, M. E.; Franklin, J. F.; Swanson, F. J.; Sollins, P.; Gregory, S. V.; Lattin, J. D.; Anderson, N. H.; Cline, S. P.; Aumen, N. G.; Sedell, J. R.; Lienkaemper, G.W.; Cromack, K.; Cummins, K. W. 1986. Ecology of coarse woody debris in temperate ecosystems. *Advances in Ecological Research*. 15:133-302.

FINAL DRAFT  
FIREMON References

### LI Method

Bauer, H. L. 1943. The statistical analysis of chaparral and other plant communities by means of transect samples. *Ecology* 24:45-60

Barbour, M.G., J. H. Burk, and W. D. Pitts. *Terrestrial Plant Ecology*. The Benjamin/Cummings Publishing Co. Inc., 1987. Pp. 182-208.

Bonham, C. D. 1989. *Measurements for Terrestrial Vegetation*. John Wiley and Sons. New York.

Canfield, R. H. 1941. Application of the line interception method in sampling range vegetation. *J. Forestry* 39:388-394.

Elzinga, C. L., D. W. Salzer, J. W. Willoughby. *Measuring and Monitoring Plant Populations*. BLM Technical Reference 1730-1. 1998.

Goldsmith, F. B., C. M. Harrison, and A. J. Morton. Description and Analysis of Vegetation. In *Methods in Plant Ecology*, Ed. P. D. Moore and S. B. Chapman, Blackwell Scientific Publications, 1986. Pp. 437-524.

Greig-Smith, P. *Quantitative Plant Ecology*. University of California Press. 1983. Pp. 1-53.

Jensen, M. E., W. H. Hann, R. E. Keane, J. Caratti, and P. S. Bourgeron. 1994. ECODATA – A multiresource database and analysis system for ecosystem description and analysis. In: Jensen, M. E. and P. S. Bourgeron, eds. *Eastside forest ecosystem health assessment, volume II: Ecosystem management: principles and applications*. General Technical Report GTR-PNW-318. Portland, OR: U. S. Department of Agriculture, Forest Service: 203-216.

Parker, K. W. and R. W. Savage 1944. Repeatability of the line interception method in measuring vegetation on the Southern Great Plains. *J. Am. Soc. Agron.* 36: 97-110.

Sampling Vegetation Attributes. Interagency Technical Reference. Ed. Bureau of Land Management's National Applied Resource Sciences Center. BLM/RS/ST-96/002+1730. 1996.

Stephenson, S. N. and M. F. Buell 1965. the reproducibility of shrub cover sampling. *Ecology* 46:379-380.

Tansley, A. G. and T. F. Chipp (eds.). 1926. *Aims and Methods in Study of Vegetation*. British Empire Veg Chee and Crown Agents for the Colonies, London, 383 pp.

FINAL DRAFT  
FIREMON References

**PD Method**

USDI National Park Service. 1992. Western Region Fire Monitoring Handbook. USDI National Park Service, Western Region, San Francisco, CA. 89 pages.

USDI National Park Service. 2001. Fire Monitoring Handbook. Boise, ID. Nation Interagency Fire Center. 283 p.

USDA USFS, Region One. 2002. Common Stand Exam Guide for Region One. USFS Region One, Missoula, MT.

USDA USFS Common Stand Exam Userguide: Version 1.5. 2001. Available at: <http://fsweb.ftcol.wo.fs.fed.us/fsveg/documentation/index.shtml>.

Hall, F. C. 2002. Photo Point Monitoring Handbook: Part A – Field Procedures. Gen. Tech. Rep. PNW-GTR-526. Portland, OR: Pacific Northwest Research Station, Forest Service, U.S. Department of Agriculture; 48 p.

Hall, F. C. 2002. Photo Point Monitoring Handbook: Part B – Concept and Analysis. Gen. Tech. Rep. PNW-GTR-526. Portland, OR: Pacific Northwest Research Station, Forest Service, U.S. Department of Agriculture; 48 p.

Coulloudon, B., Podborny, P. Eshelman, K., Rasmussen, A., Gianola, J., Robles, B., Habich, N. Shaver, P. Hughes, L., Spehar, J., Johnson, C., Willoughby, J. Pellatt, M. 1999. Sampling Vegetation Attributes. BLM, Technical Reference 1734-4. 164 p.

Miller, M. Ed., 1994. Fire Effects Guide. National Wildfire Coordinating Group. NFES 2394, Boise, ID. (Also available at: <http://fire.r9.fws.gov/ifcc/monitor/FEG.pdf>).

Grace, S. and Brownlie, D. 2002. Fuel and Fire Effects Monitoring Guide. Unpublished.

Busing, R., Rimar, K., Solte, K. W., Stohlgren, T.J. 1999. Forest Health Monitoring: Vegetation Pilot Field Methods Guide: vegetation diversity and structure down woody debris fuel loading. Research Triangle Park, NC: National Forest Health Monitoring Program.

Lesica, P. and Steele, B. M. 1997. Use of permanent plots in monitoring plant populations. Natural Area Journal. 17:331-337.

**PO Method**

Barbour, M.G., J. H. Burk, and W. D. Pitts. Terrestrial Plant Ecology. The Benjamin/Cummings Publishing Co. Inc., 1987. Pp. 182-208.

Blackman, G. E. 1935. A study of statistical methods of the distribution of species in grassland associations. Ann. Bot. 49:749-777.

FINAL DRAFT  
FIREMON References

Bonham, C. D. 1989. Measurements for Terrestrial Vegetation. John Wiley and Sons. New York.

Elzinga, C. L., D. W. Salzer, J. W. Willoughby. Measuring and Monitoring Plant Populations. BLM Technical Reference 1730-1. 1998.

Fisser, H. G., and G. M. Van Dyne. 1966. Influence of number and spacing of points on accuracy and precision of basal cover estimates. *J. Range Manage.* 19: 205-211.

Goldsmith, F. B., C. M. Harrison, and A. J. Morton. Description and Analysis of Vegetation. In Methods in Plant Ecology, Ed. P. D. Moore and S. B. Chapman, Blackwell Scientific Publications, 1986. Pp. 437-524.

Goodall, D. W. 1952. Some considerations in the use of point quadrats for the analysis of vegetation. *Aust. J. Sci. Res., Ser. B.* 5: 1-41.

Greig-Smith, P. Quantitative Plant Ecology. University of California Press. 1983. Pp. 1-53.

Jensen, M. E., W. H. Hann, R. E. Keane, J. Caratti, and P. S. Bourgeron. 1994. ECODATA – A multiresource database and analysis system for ecosystem description and analysis. In: Jensen, M. E. and P. S. Bourgeron, eds. Eastside forest ecosystem health assessment, volume II: Ecosystem management: principles and applications. General Technical Report GTR-PNW-318. Portland, OR: U. S. Department of Agriculture, Forest Service: 203-216.

Kemp, C. D. and A. W. Kemp. 1956. The analysis of point quadrat data. *Aust. J. Bot.* 4: 167-174.

Morrison, R. G. and G. A. Yarranton 1970. An instrument for rapid and precise sampling of vegetation. *Canadian Journal of Botany* 48: 293-297.

Sampling Vegetation Attributes. Interagency Technical Reference. Ed. Bureau of Land Management's National Applied Resource Sciences Center. BLM/RS/ST-96/002+1730. 1996.

### **RS Method**

Elzinga, C. L., D. W. Salzer, J. W. Willoughby. 1998. Measuring and Monitoring Plant Populations. BLM Technical Reference 1730-1.

Jensen, M. E., W. H. Hann, R. E. Keane, J. Caratti, and P. S. Bourgeron. 1994. ECODATA – A multiresource database and analysis system for ecosystem description and analysis. In: Jensen, M. E. and P. S. Bourgeron, eds. Eastside forest ecosystem health assessment, volume II: Ecosystem management: principles and applications. General

FINAL DRAFT  
FIREMON References

Technical Report GTR-PNW-318. Portland, OR: U. S. Department of Agriculture, Forest Service: 203-216.

**SC Method**

Barbour, M.G., J. H. Burk, and W. D. Pitts. Terrestrial Plant Ecology. The Benjamin/Cummings Publishing Co. Inc., 1987. Pp. 182-208.

Bonham, C. D. 1989. Measurements for Terrestrial Vegetation. John Wiley and Sons. New York.

Elzinga, C. L., D. W. Salzer, J. W. Willoughby. Measuring and Monitoring Plant Populations. BLM Technical Reference 1730-1. 1998.

Goldsmith, F. B., C. M. Harrison, and A. J. Morton. Description and Analysis of Vegetation. In Methods in Plant Ecology, Ed. P. D. Moore and S. B. Chapman, Blackwell Scientific Publications, 1986. Pp. 437-524.

Greig-Smith, P. Quantitative Plant Ecology. University of California Press. 1983. Pp. 1-53.

Jensen, M. E., W. H. Hann, R. E. Keane, J. Caratti, and P. S. Bourgeron. 1994. ECODATA – A multiresource database and analysis system for ecosystem description and analysis. In: Jensen, M. E. and P. S. Bourgeron, eds. Eastside forest ecosystem health assessment, volume II: Ecosystem management: principles and applications. General Technical Report GTR-PNW-318. Portland, OR: U. S. Department of Agriculture, Forest Service: 203-216.

Sampling Vegetation Attributes. Interagency Technical Reference. Ed. Bureau of Land Management's National Applied Resource Sciences Center. BLM/RS/ST-96/002+1730. 1996.

**TD Method**

Avery, E. A.; Burkhart, H. E. 1983. Forest measurements. New York: McGraw-Hill; 331 p.

Jensen, M.E., W. Hann, R.E. Keane, J.Caratti, and P.S. Bourgeron. 1993. ECODATA--A multiresource database and analysis system for ecosystem description and evaluation. In: M.E. Jensen and P.S. Bourgeron editors, Eastside Forest Ecosystem Health Assessment, Volume II, Ecosystem Management: Principles and Applications. USDA Forest Service, National Forest System Information Report. pg 249-265.

Gray, A. 2003. Monitoring stand structure in mature coastal Douglas-fir forests: effect of plot size. Forest Ecology and Management, 175:1-16.