

List of Poster Abstracts by Session:

Session 1: Forest Site Evaluation and Mapping Abstracts

ACIDIC DEPOSITION AND FOREST SOILS: EFFECTS, DETECTION AND PREDICTION	<i>M.B. Adams et al</i>
A PILOT STUDY TO PREDICT UPLAND HARDWOOD FOREST SITE QUALITY AND PRODUCTIVITY IN THE SOUTHERN APPALACHIANS	<i>C.A. Cotton, T.R. Fox</i>
LOBLOLLY PINE SITE QUALITY OF SOIL MAP UNITS ON THE SOUTH CAROLINA LOWER COASTAL PLAIN	<i>C.J. Everett, J.H. Thorp</i>
WHAT DATA ARE NEEDED TO INDIRECTLY QUANTIFY FOREST SOIL FERTILITY?	<i>R.L. Ficklin</i>
MAPLE TREE (<i>ACER VELUTINUM</i> BLOSS.) NUTRIENT STATUS IN PLANTATION STANDS AT MAZANDARAN PROVINCE (NORTH OF IRAN)	<i>H. Jalilvand et al</i>
SOIL INFORMATION IS ESSENTIAL FOR FOREST MANAGEMENT: SO WHY DO FEW U.S. FORESTERS USE IT?	<i>J.M. Kabrick et al</i>
DEVELOPMENT OF A FOREST SOIL QUALITY MODEL BASED ON MEASURED SOIL PROCESSES	<i>A.L. Kiyvyra et al</i>
ECOSYSTEM CLASSIFICATION AND MAPPING OF THE FRANKLIN BASIN WATERSHED, UTAH	<i>A. Kusbach et al</i>
THERMAL QUANTIFICATION OF FOREST SOIL RESOURCES: ASSESSING THE EFFECTS OF COMMON MANAGEMENT TREATMENT AND VEGETATION ON SOIL C MASS, ENERGETICS AND QUALITY	<i>G.C. Liles et al</i>
LIDAR-BASED SPATIAL MODELLING OF SOIL MOISTURE CONDITIONS AND OTHER PROPERTIES ALONG A BOREAL WETLAND-UPLAND CATENA	<i>P.N.C. Murphy et al</i>
MODELING AND MAPPING FOREST SOIL PRODUCTIVITY	<i>J. Ogilvie et al</i>
TREMBLING ASPEN SITE QUALITY IN SASKATCHEWAN AND QUEBEC AS RELATED TO SOIL AND SITE PROPERTIES	<i>B. Pinno et al</i>
SOIL CARBON DYNAMICS UNDER DIFFERENT FOREST MANagements IN JAPAN – LONG-TERM AND SHORT-TERM INFLUENCES.	<i>M. Takahashi et al</i>
AN INDEX OF FOREST SITE SENSITIVITY TO INTENSIVE BIOMASS REMOVAL FOR THE COMMERCIAL FOREST LAND OF QUEBEC (CANADA)	<i>E. Thiffault et al</i>
NON-DESTRUCTIVE SOIL CARBON MEASUREMENT IN A FOREST ECOSYSTEM	<i>L. Wielopolski</i>

Session 2: Fertility and Tree Nutrition Abstracts

- NUTRITIONAL RESPONSES OF A LOBLOLLY PINE FOREST TO BIOSOLID APPLICATION IN THE VIRGINIA PIEDMONT, USA. *E.C. Arellano, T.R. Fox*
- AVAILABILITY OF RESIDUAL PHOSPHORUS FERTILIZER FOR LOBLOLLY PINE *C.J. Everett, H. Palm-Leis*
- SOIL N FERTILITY INDICES: CAN THEY BE USED TO PREDICT JACK PINE PLANTATION PRODUCTIVITY? *P.W. Hazlett et al*
- DATABASE SOFTWARE: COMPUTER BASED FERTILIZER RECOMMENDATION GUIDE FOR CROPS OF BANGLADESH *M.S. Hossain*
- LONG-TERM EFFECTS OF PHOSPHORUS FERTILIZATION ON HEDLEY P POOLS IN SOUTHEASTERN UNITED STATES LOBLOLLY PINE (*Pinus taeda*) PLANTATIONS *B.W. Miller, T.R. Fox*
- ION EXCHANGE MEMBRANES ARE AN IMPORTANT TOOL IN FORESTRY RESEARCH FIFTY YEARS AFTER THEIR INITIAL USE *A. Redman et al*
- DEPTHWISE STATUS OF SOIL ORGANIC CARBON AND AVAILABLE NUTRIENTS UNDER VARIOUS TREE SPECIES IN PUNJAB, INDIA *K.N. Sharma, B. Singh*
- AMELIORATION OF MICRONUTRIENT DEFICIENCY IN POPLAR AND EUCALYPT PLANTATIONS *B. Singh, R.I.S. Gill*
- GROWTH RESPONSE OF CLONAL *PINUS TAEDA* FOLLOWING FERTILIZATION IN THE VIRGINIA PIEDMONT *J.P. Stovall et al*
- NUTRIENT UPTAKE BY ENGELMANN SPRUCE AND SUBALPINE FIR AT TWO COLORADO SUBALPINE FORESTS *R.D Yanai, K.J. McFarlane*

Session 3: Soil Ecology and Biogeochemistry of Forest Soils Abstracts

- COUPLING $^{87}\text{SR}/^{86}\text{SR}$ AND $\delta^{44}\text{CA}$ TO RECONSTRUCT
CA CYCLING IN A CANADIAN SHIELD BOREAL FOREST
N. Bélanger, C. Holmden
- STABLE ISOTOPE PROBING TO IDENTIFY THE
ACTIVE METHANOTROPHS IN A WESTERN
CANADIAN LODGEPOLE PINE FOREST SOIL
Per Bengtson et al
- FOREST SOIL NUTRIENT AVAILABILITY MEASURED
BY PLANT ROOT SIMULATOR PROBES ^(TM) IN
DIFFERENT FOREST TYPES AND UNDER DIFFERENT
SILVICULTURAL TREATMENTS ACROSS CANADA
B. Brockett et al
- SOIL CO₂ EMISSIONS AND BIOLOGICAL ACTIVITY
IN RESPONSE TO MASTICATED FOREST RESIDUES
M.D. Busse et al
- EFFECTS OF PRESCRIBED BURNING ON SOIL P
POOLS AND PHOSPHATASE ENZYME ACTIVITY
IN A NATIVE FOREST
C. R. Chen et al
- SOIL CARBON CHRONOSEQUENCES FROM
WESTERN NEW ENGLAND
J. Clark et al
- FINE ROOT PRODUCTION AND TURNOVER IN
DEVELOPING COTTONWOOD AND PINE GROWN
WITH IRRIGATION AND FERTILIZATION
M. Coleman, D. Aubrey
- SEA SALTS ALTER NITROGEN CYCLING IN
COASTAL FORESTS: RESULTS FROM LAB AND
FIELD EXPERIMENTS
J. E. Compton et al
- THE ROLE OF CALCIUM IN THE BIOGEOCHEMISTRY
AND ECOLOGY OF YELLOW-CEDAR FORESTS IN
THE COASTAL TEMPERATE RAINFOREST OF
SOUTHEASTERN ALASKA.
D. D'Amore et al
- TRACE METAL STATUS OF FOREST SOIL PROFILES
AT FIVE SITES ALONG AN URBAN-RURAL GRADIENT
IN NATIONAL CAPITAL REGION OF DELHI, INDIA
M.K. Dwivedi, P.S. Khillare
- THE EFFECTS OF N ENRICHMENT ON FOREST
CNP STOICHIOMETRY AT THE BEAR BROOK
WATERSHED IN MAINE
F.R. Fatemi et al
- INTRODUCING "STEMS": A SYNCHRONIZED,
TIMED-EVENT, MEASURED STEMFLOW SYSTEM
H.W. Godwin, K. O'Neill
- LITTERFALL DEPOSITION ALONG A CLIMATIC AND
VEGETATION GRADIENT, NORTHEASTERN MEXICO
T.G. Domínguez Gómez et al
- TANNINS ALTER SOIL ORGANIC MATTER
EXTRACTION, SOLUBILITY OF METALS, AND
ROOT PHYSIOLOGY
J.J. Halvorson et al
- FIRE EFFECTS ON SOIL ORGANIC MATTER
J.A. Hatten, D. Zabowski

QUALITY AND SOIL CARBON CYCLING

- A CONTRIBUTION OF ASYMBIOTICAL NITROGEN FIXATION ACTIVITY TO NITROGEN IMMOBILIZATION IN DECOMPOSING GREEN NEEDLES OF JAPANESE CEDAR (*Cryptomeria japonica*) AT A SITE OF NON-COMMERCIAL THINNING K. Hirai
- THE EFFECTIVE SOIL FACTORS ON DISTRIBUTION OF EARTHWORMS IN DIFFERENT FOREST TYPES *H. Jalilvand et al*
- CHARACTERIZATION OF SOIL MICROBIAL COMMUNITY DYNAMICS RELATED TO C AND P CYCLING ALONG A FOREST TO PASTURE GRADIENT *A.E. Jiménez-Esquilín et al*
- BIOGEOCHEMICAL CYCLING IN FOREST SOILS OF THE EASTERN SIERRA NEVADA MOUNTAINS, USA *D.W. Johnson et al*
- VERTICAL DISTRIBUTION OF EARTHWORMS AND THEIRS RELATION WITH PHYSICO – CHEMICAL PROPERTIES OF SOIL IN THE FOREST ECOSYSTEM UNITS *Y. Kooch et al*
- FOUR-DECADE DYNAMICS IN SOIL TRACE ELEMENTS OF AN OLD-FIELD FOREST: B, MN, ZN, CU AND FE *J. Li et al*
- MID-TERM EFFECTS (20-YR) OF INTENSIVE SILVICULTURE ON THE SOIL CARBON POOL *E. Maillard, A.D. Munson*
- GREENHOUSE GAS PRODUCTION AND EMISSIONS IN SASKATCHEWAN BOREAL FOREST SOILS *A.L. Matson et al*
- SOIL ABIOTIC PROPERTIES AS DETERMINANTS OF METHANE CONSUMPTION IN AUSTRALIAN ALPINE SOILS *K.J. McTaggart et al*
- ORGANIC CARBON RESTRATION DURING THE FIRST TWENTY YEARS ON THE DEBRIS AVALANCHE DEPOSIT OF THE ONTAKE VOLCANO, JAPAN *K. Morisada, M. Shibata*
- SEEING THE FORAGE AND THE TREES: SCALE AND SPATIAL HETEROGENEITY IN MIXED HARDWOOD SILVOPASTORAL SYSTEMS *Katherine O'Neill et al*
- BIOSOLIDS AND WOODCHIPS AS SOIL ORGANIC AMENDMENTS FOR PROMOTING SOIL RESTORATION IN DECOMMISSIONED FOREST ROADS *G. Orton et al*
- IMPACT OF FIRE ON ORGANIC MATTER DECOMPOSITION IN MINERAL SOIL OF WESTERN NORTH AMERICAN FORESTS *D. Page-Dumroese, M. Jurgensen*
- MERCURY ACCUMULATION IN THE FOREST FLOOR OF THE UNITED STATES *C.H. Perry et al*
- LEAF LITTER N DYNAMICS WITH AND WITHOUT *K.B. Piatek*

DOWNED WOOD – IMPLICATIONS FOR NITRATE EXPORTS FROM HARDWOOD FORESTS

Cindy E. Prescott et al

CARBON SEQUESTRATION AND GREENHOUSE GAS EXCHANGE IN BRITISH COLUMBIA CONIFEROUS FORESTS FERTILIZED WITH NITROGEN

Päivi Saari et al

ORGANIC SOIL AS A BUFFER FOR NUTRIENT EFFLUX FROM FORESTRY: STUDYING INDICATIONS FOR FUNCTIONALITY IN DYNAMICS OF DOC, N₂O, AND CH₄

T. Sajedi, C.E. Prescott

SOIL MOISTURE INFLUENCE ON NITROGEN MINERALIZATION IN TWO ADJACENT CONIFEROUS FOREST TYPES ON NORTHERN VANCOUVER ISLAND

M. Schmidt et al

THE INFLUENCE OF BIGLEAF MAPLE AND BLACK COTTONWOOD ON SOIL PROPERTIES IN BC CONIFER FOREST

B.D. Strahm et al

POSTHARVEST ORGANIC MATTER RETENTION AS A POTENTIAL MECHANISM FOR SOIL CARBON SEQUESTRATION

C. Zhang et al

FOREST LITTER DECOMPOSITION AND FOREST FLOOR BUILD-UP UNDER BOREAL CONDITIONS

Session 4: Linkages Between Forest Soils and Water Quality and Quantity Abstracts

ANNUAL SOIL WATER BALANCES OF FORESTS, CLEARCUTS, AND REGENERATING STANDS AND IMPLICATIONS FOR SOIL AND STREAM NITROGEN LOSSES IN HIGH ELEVATION FORESTS IN THE INTERIOR OF BRITISH COLUMBIA

G. Hope et al

FACTORS CONTROLLING SOIL CARBON AND NITROGEN TRANSPORT IN APPALACHIAN WATERSHEDS; IMPLICATIONS FOR NUTRIENT LOSS AND WATER QUALITY

C.N. Kelly et al

DOES LOBLOLLY PINE MANAGEMENT HAVE A ROLE IN MINIMIZING THE ENVIRONMENTAL IMPACTS OF POULTRY PRODUCTION IN THE SOUTHEASTERN UNITED STATES?

H.O. Liechty, M.A. Blazier

PINE STRAW HARVESTING EFFECTS ON WATER CONTENT OF THE SOIL VADOSE ZONE

D.H. Pote, D.M. Burner

STREAMSIDE MANAGEMENT ZONE EFFECTIVENESS IN PROTECTING WATER QUALITY FOLLOWING FORESTLAND APPLICATION OF BIOSOLIDS IN THE VIRGINIA PIEDMONT

W.A. Pratt, T.R. Fox

EVOLUTION OF PHOSPHORUS FRACTIONS FROM AN UPLAND WATERSHED TO LAKE SEDIMENTS

M.D. SanClements et al

INTRODUCING AND APPLYING A SOIL WETNESS INDEX DESIGNED FOR MODELING, GIS AND MAPPING APPLICATIONS

R.J. Schaetzl et al

Session 5: Management Effects on Growth, Production and Sustainability of Forests Abstracts

- APPALACHIAN REGIONAL REFORESTATION INITIATIVE FOR RESTORING FORESTS ON MINED LAND *P.N. Angel et al*
- COST EFFECTIVE MEANS TO MITIGATE CURRENT AND LEGACY FOREST HARVEST SOIL IMPACTS *J.G. Archuleta, M. W. Karr*
- EROSION RESPONSE OF LOBLOLLY PINE STANDS SUBJECTED TO PRESCRIBED BURNING IN THE PIEDMONT REGION OF SOUTH CAROLINA, USA *E.A. Carter et al*
- CARBON AND NUTRIENTS IN MAINE FOREST SOILS *I.J. Fernandez*
- LONG-TERM EFFECTS OF N-FERTILIZATION ON DOUGLAS-FIR FORESTS IN THE PACIFIC NORTHWEST *P.W. Footen*
- RESPONSE OF SOIL ORGANISMS TO VARYING SIZES OF AGGREGATED GREEN-TREE RETENTION *S.J. Grayston et al*
- FOREST FLOOR REMOVAL EFFECTS ON SOILS AND TREE GROWTH IN THE INTERIOR OF BRITISH COLUMBIA DEPEND ON CLIMATE AND SPECIES *G.D. Hope et al*
- SYNTHESIS OF RESEARCH ON THE NUTRITIONAL SUSTAINABILITY OF VARIABLE-RETENTION HARVESTING AS AN ALTERNATIVE TO CLEARCUTTING IN NORTHERN FORESTS *L. Jerabkova et al*
- EFFECTS OF SPOT-MOUNDING ON THE CARBON AND NITROGEN STOCKS OF A VOLCANIC SOIL IN NEW ZEALAND *H.S. Jones et al*
- IMPACTS OF INTENSIVE MANAGEMENT ON BELOWGROUND CARBON STORAGE AND SOIL ORGANIC MATTER QUALITY IN PONDEROSA PINE PLANTATIONS ALONG A SITE QUALITY GRADIENT IN NORTHERN CALIFORNIA *K.J. McFarlane et al*
- CHANGES IN SOIL WATER AND PHOSPHORUS IN RESPONSE TO THINNING, GRASS CONTROL, AND P FERTILIZATION FOR *ACACIA KOA* IN HAWAII: IMPLICATIONS FOR DEVELOPING MANAGEMENT STRATEGIES *D.F. Meason et al*
- CARBON AND NITROGEN DYNAMICS ASSOCIATED WITH POST-WILDFIRE STAND DEVELOPMENT FOR CONIFER-DOMINATED SITES IN NORTHWESTERN ONTARIO *D.M. Morris et al*
- SEQUENTIAL DENSITY FRACTIONATION OF SOIL ORGANIC MATTER IN INTENSIVELY MANAGED LOBLOLLY PINE STANDS *F.G. Sanchez et al*

CAUSE-EFFECT RELATIONS WITH REGARD TO
FUNCTIONAL AND MORPHOLOGICAL HUMUS
CHARACTERISTICS IN MIXED FOREST STANDS

K. Schua et al

TREE AND SOIL RESPONSE TO BIOMASS REMOVAL
AND VEGETATION CONTROL IN DOUGLAS-FIR
PLANTATIONS OF THE PACIFIC NORTHWEST

R.A Slesak et al