# TABLE OF CONTENTS

01.1 – THE POTENTIAL ROLE AND EFFECT OF BIOENERGY (THERMAL AND COMBINED HEAT AND POWER) MARKETS TO IMPROVE INCOME STREAMS TO FOREST LANDOWNERS

ALIGNING FOREST CARBON EXPECTATIONS WITH REALITY ................................................................. 1
  William Stewart, Jeremy Fried
THE BIOMASS ENERGY INDUSTRY AT THE NATIONAL LEVEL .............................................................. 2
  Andrea Coltes
WOOD FOR ENERGY: IS THERE PROGRESS? ........................................................................................ 3
  Larry Mason

01.2 – HOW DOES SUSTAINABLE FORESTRY RELATE TO REDUCING GREENHOUSE GAS EMISSIONS, CARBON ACCOUNTING, AND MARKETS FOR CARBON?

BUYERS' WILLINGNESS TO OFFER PRICE PREMIUMS FOR CARBON CREDITS SOURCED FROM URBAN FORESTS .................................................................................................................. 4
  Neelam Poudyal, Jacek Siry, J. M. Bowker
GREENHOUSE GAS IMPLICATIONS OF USING BIOENERGY: ENORMOUS VARIATION DEPENDING ON FEEDSTOCKS .................................................................................................................. 5
  Steven Hamburg
LANDSCAPE MANAGEMENT AND CARBON BUDGET ACCOUNTING OVER TIME ON FORESTLAND ................................................................................................................................. 6
  Xiaoping Zhou, Miles Hemstrom

01.4 – NON-INDUSTRIAL PRIVATE FOREST LANDOWNER ISSUES IN WOOD-BASED BIOENERGY

MISSOURI NON-INDUSTRIAL PRIVATE FOREST LANDOWNERS' WILLINGNESS TO PARTICIPATE OF A BIOMASS CROP ASSISTANCE PROGRAM ........................................................................... 7
  Francisco Aguilar
NONINDUSTRIAL PRIVATE LANDOWNER PRICE ACCEPTANCE AND POLICY PREFERENCE BEHAVIOR FOR WOODY BIOMASS ....................................................................................................... 8
  Sayeed Mehmood
SOCIAL VERSUS BIOPHYSICAL AVAILABILITY OF WOOD ........................................................................ 9
  Brett Butler

01.5 – EMERGING FOREST PRODUCTS MARKETS

FOREST BIOMASS AND TRANSPORTATION FUEL .................................................................................. 10
  Maro Imirzian
PHYSICAL, ECONOMIC & SOCIAL AVAILABILITY OF BIOMASS IN THE LAKE STATES .................................. 11
  Dennis Becker, Jonnathan Klapperich, Grant Donke, Mike Kilgore, Anthony D'Amato, Dean Current
POTENTIAL FOR INCREASING CARBON SEQUESTRATION RATES THROUGH MANUFACTURING LONG-LIFE WOOD PRODUCTS IN MISSISSIPPI ............................................................................. 12
  Prakash Nepal, Robert Guala, Donald Grebner

01.6 – INCORPORATING VARIOUS TECHNIQUES IN SUCCESSFUL FOREST MANAGEMENT

ECONOMICS OF NORTHERN BOBWHITE AND TIMBER MANAGEMENT IN THE SOUTHEAST .................. 13
  Ching-Hsun Huang
IS FOREST CERTIFICATION HERE TO STAY? ...................................................................................... 14
  Ron Honea
THE IMPACT OF PROFESSIONAL FORESTERS ON NIPF TIMBER HARVESTS IN WEST VIRGINIA ............ 15
  Stuart Moss, Eric Heitzman

01.7 – CARBON FORESTS

FOREST CARBON MARKET SUCCESS STORIES, LESSONS TO GROW ON ........................................... 16
  Matthew Smith
FOREST CARBON TRANSACTIONS IN NORTH AMERICA ........................................................................ 17
  T. McCormick Potter
FORESTRY CARBON PROJECTS - WHY BOTHER .......................................................... 18
Gregory Arnold
NEW OPPORTUNITIES AND CHALLENGES FOR FOREST MANAGEMENT IN A CARBON-
CONSTRAINED WORLD ................................................................................. 19
Christie Pollet-Young

02.1 – BARK BEETLE OUTBREAKS IN NORTH AMERICA

BARK BEETLE OUTBREAKS IN NORTH AMERICA .......................................................... 20
David Shaw, Robert Progar
IPS IN THE SOUTHWEST .................................................................................. 21
Joel McMillin
OUTBREAKS OF THE SOUTHERN PINE BEETLE .................................................. 22
Stephen Clarke
THE 21ST CENTURY OUTBREAK: MOUNTAIN PINE BEETLE IN COLORADO .......... 23
Tom Eager

02.2 – MORTALITY AND REGENERATION

INFLUENCE OF SOCIOECONOMIC AND SPATIAL CHARACTERISTICS ON WILDFIRE TYPES IN MISSISSIPPI ................................................................. 24
Robert Grala, Katarzyna Grala, Anwar Hussain, William Cooke
RISK OF FIRE RELATED SPECIES LOSSES IN URBAN PARK FORESTS .............. 25
Robert Lobel
SOUTHERN PINE BEETLE HAZARD RATING USING HIGH SPATIAL RESOLUTION DIGITAL IMAGERY .................................................................................. 48
David Kulhavy, Daniel Unger, I-Kuai Hung

02.3 INVASIVE FOREST INSECTS AND DISEASE IN NORTH AMERICA

EARLY DETECTION RAPID RESPONSE FOR NON-NATIVE BARK BEETLES ................. 49
Bob Rabaglia
INVASIVE FOREST INSECTS AND DISEASE IN NORTH AMERICA ....................... 50
David Shaw, Robert Progar
INVASIVE FOREST INSECTS IN THE WESTERN UNITED STATES: UPDATE ON STATUS AND TRENDS .............................................................. 51
Steve Seybold
MANAGEMENT CONSIDERATIONS FOR A NON-NATIVE FOREST PATHOGEN: CRONARTIUM RIBICOLA ................................................................. 52
Patricia Maloney

02.4 IMPACTS OF INVASIVE SPECIES

ESTABLISHMENT OF THE HEMLOCK WOOLLY ADELGID PREDATOR, LARICOBUS NIGRINUS, IN THE EASTERN UNITED STATES ........................................ 53
David Mausel, Scott Salom, Loke Kok, Gina Davis
IMPACTS OF SUDDEN OAK DEATH AT POINT REYES NATIONAL SEASHORE .......... 54
Benjamin Ramage, Allison Forrestel, Max Moritz, Kevin O'Hara
REVISITING LEOPOLD'S PERFECT LAND HEALTH IN MEXICO'S RIO GAVILAN WATERSHED ............................................................... 55
William Forbes

02.5 – FIRE INTERACTIONS WITH FOREST INSECTS AND DISEASES

BARK BEETLES AND FIRE .............................................................................. 70
Chris Fettig
FIRE AND DWARF MISTLETOES ................................................................. 71
Dave Conklin
FIRE INTERACTIONS WITH FOREST INSECTS AND DISEASES ....................... 72
David Shaw, Robert Progar
SUDDEN OAK DEATH AND FIRE ............................................................... 73
Dave Rizzo

02.6 – PRIORITIZING FUEL TREATMENTS ACROSS DISCIPLINES AND OWNERSHIPS

PRIORITIZING FUEL TREATMENTS ACROSS DISCIPLINES AND OWNERSHIPS ........ 74
Miles Hemstrom, Xiaoping Zhou, Janine Salwasser, Sean Gordon
02.7 – WORKING WITH FIRE

10 YEARS AFTER: A COUNTY'S SUCCESS IN FIRE PREVENTION ASSISTANCE .......................................................... 75
  Peter Vigil, Kurt Swearengen

INTEGRATION OF TRADITIONAL ECOLOGICAL KNOWLEDGE AND WESTERN SCIENCE FOR FIRE MANAGEMENT .......................................................... 76
  Ernesto Alvarado, Gary Morishima, Larry Mason

MEXICAN FIRE REGIMES: UNIQUE OPPORTUNITIES FOR INTERNATIONAL RESEARCH AND MANAGEMENT .......................................................... 77
  Peter Fulé, Larissa Yocom, Citlali Cortés-Montaño

THE CARBON BALANCE OF SOUTHWESTERN PONDEROSA PINE FORESTS .......................................................... 78
  Thomas Kolb

04.5 – INTERNATIONAL FORESTRY

FORESTS AND FORESTRY IN GUYANA, SOUTH AMERICA .................................................................................. 79
  Eric Heitzman

MEASURING THE PROGRESS AND EFFICACY OF COMMUNITY FORESTRY PROGRAMS IN INDIA ........................................... 80
  Chandrani Ghosh, Rene Germain

REFORESTATION AND WATERSHED REHABILITATION WITH THE U.S. MILITARY IN AFGHANISTAN .......................................................... 81
  Charles Raffner, John Groninger

04.6 – CONNECTING WITH THE GLOBAL MARKETPLACE

IMPROVING COMPETITIVENESS OF THE U.S. FOREST SECTOR THROUGH BUSINESS CLUSTERING ........................................... 82
  Robert Grala, Francisco Aguilar, Ian Munn, Stephen Bratkovich, Kathryn Fernholz

OPPORTUNITIES IN GLOBAL COMPETENCY & INTERNATIONAL EXPERIENCE .......................................................... 83
  Eric Goldman

PROMOTING A STATEWIDE FRAMEWORK FOR SUSTAINABLE FOREST MANAGEMENT IN OREGON .......................................................... 84
  David Morman

05.1 – WILDLIFE AND PEOPLE

WILDLIFE AND PEOPLE: A WATERSHED OF ISSUES .................................................................................. 85
  James Kroll, Mark Duda, Pat Stephens Williams, Mike Legg

05.2 – HUMAN DIMENSIONS OF THE MARKETPLACE

A GATHERING VOICE: WILDCRAFTER NETWORKING AND EMPOWERMENT IN NORTH AMERICA .................................................. 86
  Ritchie Vaughan, John Munsell

FOREST COOPERATIVES: COMMUNITY-BASED PARTNERS FOR INCREASING PARTICIPATION IN FOREST CONSERVATION .......................................................... 87
  Colin Donohue, Scott Bagley

HOW EFFECTIVE IS ECOTOURISM CERTIFICATION IN SUPPORTING SUSTAINABLE DEVELOPMENT?: DEFINING ECOTOURISM AND PRINCIPLES OF SUSTAINABILITY .......................................................... 88
  Tinelle Bustam, Natalia Buta

05.3 - LEADERSHIP

DEVELOPING FUTURE NATURAL RESOURCE LEADERS THROUGH INTENSIVE ON-CAMPUS EXPERIENCES .......................................................... 89
  Joey Mehlhorn, Philip Smarts, Scott Parrott, Tim Burcham

MILITARY TRAINING ON THE APPALACHIAN TRAIL: PARTICIPANT ATTITUDES AND EXPERIENCES .......................................................... 90
  Roger Moore, Jordan Smith

05.4 – INNOVATIVE MEANS FOR UNDERSTANDING AND ENGAGING LANDOWNERS

INNOVATIVE MEANS OF UNDERSTANDING AND ENGAGING LANDOWNERS .......................................................... 91
  Brett Butler
05.5 – EXPANDING CONNECTIONS

BUILDING NATIONAL PARTNERSHIPS TO EXPAND LOCAL CONNECTIONS: THE TRICKLE DOWN ........................................ 92
Timberly Conway, Pat Stephens Williams, Safiya Samman, Mike Legg

LOGS OR BLOGS: SHARING FORESTRY STORIES WITH THE PUBLIC ................................................................. 93
Mary Stuever

NO CHAIN ON THE BAR: WEBSITES THAT DON’T CUT IT! ......................................................................................... 94
Nora McDougall-Collins, Colin Donohue

05.6 – PEOPLE IN YOUR WATERSHED

CONFLICT: BRINGING SUIT AGAINST THE U.S. FOREST SERVICE ........................................................................... 95
Christopher Buczko, Benjamin Wudtke

CONNECTING TO NATURE THROUGH PUBLIC LANDS: STRIVING TOWARDS SUSTAINABLE RECREATION .............................................................. 96
Cynthia Wilkerson

CONSERVATION DISTRICTS - FORESTRY AND PEOPLE IN YOUR WATERSHED .......................................................... 97
Doug Rushton

05.7 – THE CHANGING FACE OF LANDOWNER ASSISTANCE PROGRAMS

ARMY TRAINING AND HEALTHY FORESTS - THE BEST OF BOTH WORLDS ............................................................... 98
Malcolm Boswell

OREGON PARTNERSHIP FOR FORESTRY LANDMANAGER EDUCATION ...................................................................... 99
Mike Cloughesy, Julie Woodward

PEER LEARNING: A STRATEGY FOR EFFECTIVE FORESTRY EXTENSION AND OUTREACH ......................................... 100
Zhao Ma, David Kittredge, Paul Catanzerio, Brett Butler

THE CHANGING FACE OF LANDOWNER ASSISTANCE PROGRAMS IN THE 2008 FARM BILL ........................................ 101
Jessi Ouzts

06.3 – FOREST OWNERSHIP TRENDS

FOREST PARCELIZATION PATTERNS IN THE HUDSON RIVER WATERSHED, 2004-2009 ................................................. 102
Andrew Roe, Shorna Broussard Allred

IMPLICATIONS OF PRIVATE FORESTLAND OWNERSHIP CHANGE IN THE U.S. ................................................................. 103
Jacek Siry, Tom Harris, Bob Izlar

Richard A. Harper

06.4 – THE CHANGING USE OF FOREST PRODUCTS

ASSESSING FORESTATION OPPORTUNITIES FOR CARBON SEQUESTRATION IN MINNESOTA .................................... 105
Dennis Becker, Grant Domke, Steve Taff, Clarence Turner

IMPACTS OF MANAGING LOBLOLLY PINE PLANTATIONS WITH SWITCHGRASS FOR BIOFUELS PRODUCTION ON SITE PRODUCTIVITY, WILDLIFE AND HYDROLOGY ........................................................................ 106
Eric Sucre, Zakiya Leggett

NETWORK-BASED RESOURCE PROXIMITY ANALYSIS FOR PRIMARY WOOD MILLS IN ARKANSAS. ........................... 107
Julius Adewopo

06.5 – FAMILY FORESTLANDS: AGROFORESTRY

FAMILY FORESTLANDS: AGROFORESTRY FOR COMMODITY PRODUCTION AND ECOSYSTEM SERVICES .............................................................. 108
Andy Mason, Bruce Wight, Dusty Walter, Timothy Volk, Ranjith Udawatta, Shibu Jose

06.7 – CONSERVATION IN THE MIDST OF DEVELOPMENT

CONSERVING NATURAL RESOURCES IN GROWING PLACES: AN INTRODUCTION TO LAND USE PLANNING AND REGULATORY POLICY ......................................................... 109
William Elmendorf

NEW OPPORTUNITIES FOR FOREST LAND OWNERS ........................................................................................................ 110
Thom McEvoy

THREATS TO WESTERN PRIVATE FORESTS: A FRAMEWORK FOR CONSERVING AND ENHANCING THE BENEFITS FROM PRIVATE WORKING FORESTS IN THE WESTERN U.S. ................................. 111
Mo Bookwalter, Dana Coalho, Tom Jacobs, Brian Kernohan, Sara Leiman, Don Motanic, Jim Paul, John Perez-Garcia, Will Putman, Susan Rich, Gregg Servheen, Edward Smith, Susan Stein, Faye Stewart, Ralph Their, Ann Walker
07.3 - PERSPECTIVE

HYDROLOGIC PROCESSES AND EFFECTS OF OVERSTORY REMOVAL ON THE HYDROLOGY OF PINYON-JUNIPER WOODLANDS: A HISTORICAL REVIEW .......................................................... 131
Peter Ffolliott, Gerald Gottfried

NEW PIÑON-JUNIPER MANAGEMENT REGULATIONS AND PRACTICES IN NEW MEXICO ................................................................. 175
Doug Cram, Terrell Baker

PIÑON AND JUNIPER: PREHISTORIC AND HISTORIC USE IN THE ARCHAEOLOGICAL RECORD .................................................. 176
Tim Kelly, Lynn Harrell, Brian Bergman, Mark L. Howe

07.4 – GROWTH, MORTALITY AND RECOVERY

DESCRIPTION OF CARBON POOLS WITHIN A PIÑON-JUNIPER WOODLAND IN NORTHERN NEW MEXICO ................................................................. 177
John Harrington, Mark Loveall

GROWTH, MORTALITY, AND RECOVERY OF PINYON-JUNIPER WOODLANDS .................................................................................. 178
John Shaw

INSECT AND DISEASE CONSIDERATIONS IN SOUTHWESTERN PIÑON-JUNIPER MANAGEMENT ........................................ 179
Debra Allen-Reid, Robert Cain

07.5 - ECOLOGY

IMPACTS OF WOODY DEBRIS ADDITIONS IN PINYON-JUNIPER WOODLANDS .................................................................................. 180
Steven Overby, Gerald Gottfried, Suzanne Owen, Michael Battaglia

MECHANICALLY SHREDDING UTAH JUNIPER CHANGES FUEL CHARACTERISTICS .................................................. 181
Kurt Young, Bruce Boundy

PYGMY CONIFERS IN NEW MEXICO: WHERE IS ENCROACHMENT? .................................................................................. 182
Ken Bentson

07.6 - SILVICULTURE

PINYON-JUNiper ENIGMA: IS PRESCRIBED FIRE AN OPTION? .................................................................................. 200
Richard Reitz

SILVICULTURAL METHODS FOR PINYON-JUNIPER ECOSYSTEMS .................................................................................. 201
Douglas Page

07.7 – FIRE EFFECTS

ASBESTOS WOODLANDS TO CROWN FIRES: PINYON-JUNIPER FIRE REGIMES ........................................................................ 202
Thomas Swetnam

DEVELOPMENT OF LANDSCAPE SCALE STATE AND TRANSITION MODELS FOR PINYON-JUNIPER WOODLANDS IN THE SOUTHWESTERN USA ........................................................................ 203
Steven Strenger, Wayne Robbie

PINON-JUNIPER WOODLAND CHANGES AFTER WILDFIRES AND BEETLE INFESTATIONS, MESA VERDE NATIONAL PARK .................................................................................. 204
Lisa Floyd-Hanna

08.1 - POSTERS

A COMPARISON AMONG THREE SAMPLING TECHNIQUES FOR CANOPY COVER IN THREE FOREST COVER TYPES .................................................................................. 205
W. David Hacker, Jacob M. Archuleta

A FOREST INSECT ALPHABET BOOK .................................................................................. 206
Jones Charles, David Kalhavy

A LONG-TERM COMPARISON OF PRE- AND POST-PRESCRIBED FIRE TREATMENTS IN BRYCE CANYON AND ZION NATIONAL PARKS .................................................................................. 207
Katie Johnson, Kristen Waring

A POST-TIMBER WAR PARADIGM: COLLABORATIVELY-BASED LANDSCAPE-SCALE RESTORATION STRATEGIES FOR ARIZONA .................................................................................. 208
Steven Sesnie, Jill Rundall, Neil McCusker, Mary Lata, Tom Sisk

A SPATIAL MODEL OF INFLUENCE ON FOREST GROWTH IN ALASKA .................................................................................. 209
Jingjing Liang, Brian Young

A THIRTY-YEAR (1912-1941) RETROSPECTIVE ANALYSIS OF VEGETATION RECOVERY FOLLOWING GRAZING IN SOUTHWESTERN PONDEROSA PINE-BUNCHGRASS FORESTS .................................................................................. 210
Robert Strahan, Jonathan Bakker, Daniel Laughlin, Margaret Moore
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Chestnut Past and Future: Implications for Eastern Forest Consumer Populations</td>
<td>211</td>
</tr>
<tr>
<td>Américorps and Trees: Urban Forest Inventory in San José, California</td>
<td>212</td>
</tr>
<tr>
<td>Assessing the Survival of Trees after Fire Injury in Oregon and Washington</td>
<td>213</td>
</tr>
<tr>
<td>Attenuation of Aerially Applied Spray within a Riparian Management Area</td>
<td>214</td>
</tr>
<tr>
<td>Beech Dynamics after Shelterwood Seed Cutting at Huntington Wildlife Forest</td>
<td>215</td>
</tr>
<tr>
<td>Beech Thickets Impact Northern Hardwood Forest Biodiversity</td>
<td>216</td>
</tr>
<tr>
<td>Biomass Alloymetry of Non-Merchandized Tops for Pulpwood-Sized Red Pine</td>
<td>217</td>
</tr>
<tr>
<td>Biomass and Carbon Stocking in Mixed-Conifer Stands of the Lake Tahoe Basin</td>
<td>218</td>
</tr>
<tr>
<td>Biomass and Coal Cofiring - Status of North American Facilities</td>
<td>219</td>
</tr>
<tr>
<td>Challenges in Designing and Implementing Collaborative Processes in the Michigan Dnr</td>
<td>220</td>
</tr>
<tr>
<td>Cloud Computing and Geospatial Webcrawlers Improve the Science of Wildland Threat Assessment</td>
<td>221</td>
</tr>
<tr>
<td>Collaboration Groupware Technology in Support of Land Management Planning</td>
<td>222</td>
</tr>
<tr>
<td>Community Energy Management in Southeast Alaska - Is Sitka a Carbon-Neutral Community?</td>
<td>223</td>
</tr>
<tr>
<td>Community Fuel Reduction Pre- and Post Treatment Monitoring</td>
<td>224</td>
</tr>
<tr>
<td>Comparing Attributes of Eastern Redcedar Mulch to Other Wood Mulches</td>
<td>225</td>
</tr>
<tr>
<td>Comparing Management Options with Carbon Accounting in Mind in Michigan</td>
<td>226</td>
</tr>
<tr>
<td>Conifer Regeneration Following Fire in Grand Canyon National Park</td>
<td>227</td>
</tr>
<tr>
<td>Connecting Students with the Global Community</td>
<td>228</td>
</tr>
<tr>
<td>Contemporary Challenges to Public Land Management: The Implications of Crime on Outdoor Recreation Involvement and Place Attachment</td>
<td>229</td>
</tr>
<tr>
<td>Crown Ideotypes as a Silvicultural Tool in Varietal Lobolly Pines</td>
<td>230</td>
</tr>
<tr>
<td>Detecting Streamflow Changes Following Harvesting: A Hydrologic Model Approach</td>
<td>231</td>
</tr>
<tr>
<td>Determining Valley Bottom / An Automated Approach Using GIS</td>
<td>232</td>
</tr>
<tr>
<td>Developing Scenic Beauty Maps of an Urban Forest Using Moment-to-Moment Derived Data and GIS</td>
<td>233</td>
</tr>
<tr>
<td>Dynamics of Alaska Boreal Forest</td>
<td>234</td>
</tr>
<tr>
<td>Early Response of a Jeffrey Pine Understory Community to Thinning and Underburning Restoration Treatments</td>
<td>235</td>
</tr>
<tr>
<td>Ecosystem Services as a Management Framework for National Forests</td>
<td>236</td>
</tr>
<tr>
<td>Edge of Life: Forest Pathology Art</td>
<td>237</td>
</tr>
<tr>
<td>Effects of Logging Technique on Microtopography in Southeastern Taxodium-Nyssa Swamps</td>
<td>238</td>
</tr>
<tr>
<td>Effects of Mountain Pine Beetle 20 - 30 Years After Outbreak</td>
<td>239</td>
</tr>
<tr>
<td>Efforts to Reduce Mountain Pine Beetle Attack in Lodgepole Pine Using Verbenone</td>
<td>240</td>
</tr>
</tbody>
</table>
ESTIMATING CHANGE FROM THE FOREST HEALTH MONITORING STREET TREE INVENTORY .................................................................241
Mark Ambrose

EVALUATION OF STEM-INJECTED EMAMECTIN BENZOATE AGAINST MOUNTAIN PINE BEETLE IN CALIFORNIA .................................................................................................................................242
Sheri Smith, Brian Strom, Joseph Fischer

EVALUATION OF TSI AND PRESCRIBED BURNING ON RESIDUAL TREE GROWTH IN OAK DOMINATED FORESTS .................................................................................................................................243
Margaret Anderson, Eric Holzmueller, Charles Raffner, John Groninger

EXPERIENTIAL LEARNING TO ENGAGE PUBLIC SCHOOL STUDENTS IN FOREST ECOLOGY .................................................................................................................................244
John Seiler, Carolyn Copenheaver, John Peterson, Nick Fuhrman

FIA ASSESSED CARBON DYNAMICS ON CALIFORNIA NATIONAL FORESTS SHOWS FIRE TRUMPS HARVEST AS A DRIVER OF CARBON POOL FLUX .................................................................................................................................245
Jeremy Fried

FIRE AND WATERSHEDS: THE ROLE OF FOREST .................................................................................................................................246
Marta Mitranov-Murcia

FIREWOOD MOVEMENT: A THREAT TO CALIFORNIA’S FORESTS .................................................................................................................................247
Matthew Bokach, Lisa Fischer, Julie Lydick, Martin Mackenzie

FLORIDA COMMUNITY FOREST STEWARD PROGRAM .................................................................................................................................248
Michael Andreeu, Robert Northrop

FOREST INVENTORY AND ANALYSIS TREE-RING DATA: A WEALTH OF INFORMATION .................................................................................................................................249
Justin Derose, John Shaw, James N. Long

FOREST RECOVERY FOLLOWING A LARGE-SCALE MIXED SEVERITY WILDFIRE, BLACK HILLS .................................................................................................................................250
Benjamin Wudike

FOREST STOCKING AND REMOVALS FROM RECENTLY HARVESTED HARDWOOD STANDS IN MICHIGAN: PRELIMINARY RESULTS .................................................................................................................................251
Nan Davis, Robert Proseu

FORMALIZING MECHANISMS FOR SCIENCE/MANAGER PARTNERSHIPS AT THE ROCKY MOUNTAIN RESEARCH STATION .................................................................................................................................252
Claudia Regan

FOUR FOREST RESTORATION INITIATIVE - A COLLABORATIVE EFFORT TO RESTORE ECOSYSTEMS ON FOUR NATIONAL FORESTS .................................................................................................................................253
Bonnie Stevens

FOUR FOREST RESTORATION INITIATIVE - HOW TO GET INVOLVED .................................................................................................................................254
Brady Smith, Brady Smith, Bonnie Stevens

HAZARD RATING FOR SOUTHERN PINE BEETLE IN EAST TEXAS FORESTS .................................................................................................................................255
David Kulhavy, Daniel Unger

HERBACEOUS COMMUNITY SHIFTS IN A NORTHERN HARDWOOD FOREST .................................................................................................................................256
Janine Salwasser, Jack Triepke, Sean Gordon, Lisa Ekman

IMPACT OF PRESCRIBED BURNING FOR OAK REGENERATION ON WHITE-FOOTED MICE .................................................................................................................................257
Robin Reich, John Lundquist

IMPROVING PREDICTIONS OF FOREST INSECT DISTRIBUTIONS IN ALASKAN REMOTE AREAS .................................................................................................................................258
Linda Wang

INCOME TAX ISSUES ON WOODLAND .................................................................................................................................................................................................259

INDIVIDUAL TREE COMPETITION INDICES: USING PRISMS TO DETERMINE COMPETITOR TREES .................................................................................................................................................................................................260
Joshua Leduc, Aaron Wallace, Paul Doruska

INTEGRATED LANDSCAPE ASSESSMENT PROJECT: SCIENCE DELIVERY, KNOWLEDGE DISCOVERY & DECISION SUPPORT .................................................................................................................................................................................................261
Janine Salwasser, Jack Triepke, Sean Gordon, Lisa Ekman

INTEGRATING BIOENERGY SCIENCE AND TECHNOLOGY INTO URBAN FOREST WOOD-WASTE UTILIZATION EDUCATION .................................................................................................................................262
Zhu Ning, Kamran Abdollahi

INTEGRATING CLIMATE CHANGE EDUCATION INTO URBAN FORESTRY CURRICULA .................................................................................................................................................................................................263
Zhu Ning, Kamran Abdollahi

INTERNATIONAL STUDENT EXCHANGE AS A VEHICLE FOR CREATING AN ETHNIC AND CULTURALLY DIVERSE EXPERIENCE FOR FORESTRY STUDENTS .................................................................................................................................................................................................267
J. Doland Nichols, Jennifer Tions, Marilyn Poirier, Michael Wagner

LAND, PEOPLE, & WATER: INTERPRETING STAKEHOLDER CONNECTIONS AND FUTURE RESOURCES .................................................................................................................................................................................................268
Lynda Folts, Mike Legg, Ray Darville, Florence Elliott-Howard, David Kulhavy

MANAGEMENT PLANS FOR MICHIGAN’S COMMERCIAL FOREST ACT .................................................................................................................................269
Jacob Oswald, Sarah Sterling, Blair Orr

MICHIGAN’S FOREST PRODUCTS SECTOR: ARE THEY READY FOR PROMOTING BIOENERGY? .................................................................................................................................................................................................270
Karen Potter-Witter, G. C. Shivan

MODELING FOREST ROAD EROSION IN THE OUACHITA MOUNTAINS OF OKLAHOMA .................................................................................................................................................................................................271
Don Torttun, Elaine Stehler, Jami Netles

MODELING INVASIVE EXOTIC PLANT DISTRIBUTION IN AN URBAN FOREST .................................................................................................................................................................................................272
Michael Shouse, Songlin Fei
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modeling Precipitation-Runoff Relationships to Determine Water Yield from Forested Watersheds</td>
<td>273</td>
</tr>
<tr>
<td>Morphological and Physiological Adaptive Traits of Shortleaf X Lobolly Pine Hybrids</td>
<td>274</td>
</tr>
<tr>
<td>Native Employment in Tribal Forestry Programs</td>
<td>275</td>
</tr>
<tr>
<td>Native Perennial Grasses Out-Compete an Invasive Annual Grass</td>
<td>276</td>
</tr>
<tr>
<td>Native Plant Establishment in Late Summer</td>
<td>277</td>
</tr>
<tr>
<td>New Opportunities for Graduate-Level Experience in International Forestry: Peace Corps/Nau Pilot Partnership</td>
<td>278</td>
</tr>
<tr>
<td>Non-Industrial Private Landowner's Knowledge and Awareness of Sustained Yield Management in the Northern Forest</td>
<td>279</td>
</tr>
<tr>
<td>Non-Timber Forest Products from Valuable Timber Species in Ghana West Africa</td>
<td>280</td>
</tr>
<tr>
<td>Pathways to Uneven-Aged Stand Structure for Black Hills Ponderosa</td>
<td>282</td>
</tr>
<tr>
<td>Planted Bur Oak and Pecan Seedling Performance in Relation to Canopy Gap Size</td>
<td>283</td>
</tr>
<tr>
<td>Plot Scale Water Flux on Thinned Mixed Conifer Stands in Cloudcroft, NM</td>
<td>284</td>
</tr>
<tr>
<td>Post-Harvest Establishment and Impacts of Exotic Invasive Plants on Native Woody Regeneration in Eastern Kentucky</td>
<td>285</td>
</tr>
<tr>
<td>Prediction of Climatic Limits of Emerald Ash Borer (EAB) Invasions in the North America</td>
<td>286</td>
</tr>
<tr>
<td>Rapid Aspen Decline on the Southwestern Edge of Its Range</td>
<td>287</td>
</tr>
<tr>
<td>Recreative Opportunities for No Freshman Left Insice</td>
<td>288</td>
</tr>
<tr>
<td>Regional Variation of Non-Industrial Private Forest Owners in Michigan</td>
<td>289</td>
</tr>
<tr>
<td>Relationship Between Drought Severity and Bark Beetle-Attributed Mortality Within California from 2002-2009</td>
<td>290</td>
</tr>
<tr>
<td>Researching Laminated Root Rot</td>
<td>291</td>
</tr>
<tr>
<td>Response of Small Mammal and Bird Populations to Fuel Treatment in a Ponderosa Pine Forest, New Mexico</td>
<td>292</td>
</tr>
<tr>
<td>Sawtimber Demand and Sustained Yield Management in the Northern Forest</td>
<td>293</td>
</tr>
<tr>
<td>Seeing the Trees in the Forest When Estimating Riparian Shade</td>
<td>294</td>
</tr>
<tr>
<td>Sister Stewards: How Roman Catholic Women Religious Manage Their Forestland</td>
<td>310</td>
</tr>
<tr>
<td>Soil Age Influences Pinyon Pine Growth, Water Stress, and Mortality</td>
<td>311</td>
</tr>
<tr>
<td>Southern Rocky Mountain Science Delivery and Outreach Consortium Project</td>
<td>312</td>
</tr>
<tr>
<td>Stewardship Contracting on National Forests: Economic Panacea or Predicament?</td>
<td>313</td>
</tr>
<tr>
<td>Strengthening the Global Competence in Forestry and Agriculture</td>
<td>314</td>
</tr>
<tr>
<td>Teak Plantations: Economic Bonanza or Environmental Disaster?</td>
<td>319</td>
</tr>
<tr>
<td>Temporal Healing of Sugar Maple Bark Defect Indicators</td>
<td>320</td>
</tr>
<tr>
<td>The Alsea Watershed Study Revisited 2010</td>
<td>321</td>
</tr>
</tbody>
</table>

George Ice, V. Cody Hale, Jeff Light, Jeffrey McDonnell, Doug Bateman, Judy Li, William Gerth
THE EFFECTS OF FOREST HARVESTING ON SOIL BULK DENSITY AND INFILTRATION ................................................................. 322
Matthew McBroom, Max Wayne Jackson

THE IDENTIFICATION AND CORRELATION OF THE COMPETITIVE INFLUENCES OF CHINESE TALLOW TREE .......................................................... 323
Keith Dailey, Levi Gibson

THE SOUTHERN FIRE EXCHANGE: A JOINT FIRE SCIENCE PROGRAM KNOWLEDGE EXCHANGE CONSORTIUM ......................................................... 324
Leda N. Kotevich

THE SOUTHWEST CLIMATE CHANGE INITIATIVE: INFORMATION TO MANAGE CHANGING LANDSCAPES ............................ 325
Marcus Robles, Patrick McCarthy, Edward Smith

THE SOUTHWEST FIRE SCIENCE CONSORTIUM: A NEW OPPORTUNITY IN FIRE SCIENCE AND MANAGEMENT .......................... 326
Andrea E. Thode

THE SOUTHWEST JEMEZ MOUNTAINS LANDSCAPE RESTORATION PROJECT: STRATEGIES FOR LANDSCAPE RESTORATION ACROSS MULTI-JURISDICTIONAL BOUNDARIES. ........................................................................ 327
Jessica Clement, Jon Williams

THERMAL RESPIRATORY ACCLIMATION IN LEAVES OF FERTILIZED AND NONFERTILIZED SOYBEANS ......................................................... 328
Jessica Lagrone, Dylan Dillaway, Michael Tyree

TIMBER RESOURCES AND FACTORS AFFECTING AVAILABILITY FOR A CELLULOSIC ETHANOL FACILITY IN MICHIGAN .......................... 329
Larry LeFebre, J. Michael Vastieviich

TIP MOTH IN YOUNG PINE PLANTATIONS: IMPACT AND HAZARD-RATING ......................................................... 337
Trevor Walker

TRAVEL MANAGEMENT ON NATIONAL FOREST SYSTEM LANDS: FUTURE CHALLENGES AND LESSONS LEARNED ................................. 338
Timelle Bustam, Christopher O'Brien, Tamera Taylor

UNDERSTANDING FIRE SCIENCE DELIVERY: PERSPECTIVES OF POTENTIAL FIRE SCIENCE USERS ................................. 339
Vita Wright

UNDERSTANDING FOREST RECOVERY AND SUSTAINABILITY OF RESIDUE HARVEST ......................................................... 340
Trevor Roberts, Robert Froese

URBAN TREE DISTRIBUTION AND CROWN SIZE WITHIN THE SAHEL ........................................................................ 341
Sarah Sterling, Blair Orr

USDA-NRCS CONSERVATION STEWARDSHIP PROGRAM REWARDS GOOD FOREST MANAGERS ......................................................... 342
Sally Butler

USFS PERSPECTIVES OF COLLABORATIVE KAIBAB FOREST HEALTH FOCUS ........................................................................ 343
Erik Nielsen

USING FORVAL FOR FINANCIAL ANALYSIS OF URBAN TREES AND FORESTS ................................................................. 344
Thomas Straka, Kristin Peterson

USING GIS TO AUTOMATE A USFS ECOLOGICAL PLANNING & DECISION SUPPORT PROCESS ......................................................... 345
Michael Greco

VARIATION IN SPRING TEMPERATURE AND BREEDING IN A CONIFEROUS-FOREST BIRD ......................................................... 346
Sharon Coe

09.1 – CHANGING CONDITIONS

COOPERATIVE EXTENSION CLIMATE CHANGE RESOURCES FOR FOREST MANAGERS ......................................................... 347
Christopher Jones, Michael Crimmins, Thomas Dogomez, Gregg Garfin

DEER POPULATION INFLUENCE ON SUCCESSIONAL TRENDS IN WISCONSIN FORESTS AS EVIDENCED BY SEEDLING COMPOSITION AND NUMBER ........................................................................ 348
W. Keith Moser, Mark Hansen, Mark Nelson

ECONOMIC AND LIFE CYCLE ASSESSMENT IN HARVESTING FOREST BIOMASS FOR ENERGY ......................................................... 349
Dalila Abbas

ACTIVITIES FROM THE COLORADO FOREST RESTORATION INSTITUTE AT COLORADO STATE UNIVERSITY ......................................................... 350
Jessica Clement

09.2 – RESTORATION IN PROGRESS

ACTIVITIES FROM THE NEW MEXICO FOREST AND WATERSHED RESTORATION INSTITUTE AT NEW MEXICO HIGHLANDS UNIVERSITY ........................................................................ 351
Kent Reid

THE ECOLOGICAL RESTORATION INSTITUTE (NORTHERN ARIZONA UNIVERSITY): SCIENCE SUPPORTING FOREST RESTORATION ........................................................................ 352
W. Wallace Covington
09.5 – RESTORATION SILVICULTURE

RESTORATION SILVICULTURE: THE ROLE OF SILVICULTURE IN MEETING RESTORATION OBJECTIVES ................................................................. 353
   Steven Jack, Eric Zenner, Justin Derose, Christopher Webster

09.6 – SOUTHWESTERN FORESTS

LANDSCAPE-SCALE, OLD PONDEROSA PINE MORTALITY AT MT.TRUMBULL, NORTHERN ARIZONA .......... 354
   Kristen Waring, Chris Erickson

RESTORATION OF WHITE SPRUCE FORESTS IN ALASKA ................................................................. 355
   Andrew Youngblood

09.7 – COMPOSITION AND STRUCTURE

A SILVICULTURE SYSTEM DESIGNED TO MEET FUEL, RESTORATION, AND RESILIENCE ............................................................. 356
   Theresa Jain, Russell Graham

RESTORATION OF NATIVE UPLAND ACACIA KOA FORESTS IN HAWAII ...................................................... 357
   James Friday, Travis Idol, Michael Robinson, Nick Koch

THE EFFECT OF SILVICULTURAL CUTTING ON COMPOSITION AND STRUCTURE OF MIXED HARDWOOD OAK FORESTS ........................................... 358
   Yvette Dickinson, Eric Zenner

THINNING: A TOOL FOR RESTORATION OF CALIFORNIA’S OAK WOODLANDS ...................................................... 359
   Richard Standiford, Neil McDougald, Douglas McCreary

10.1 – ENHANCING WATER YIELD THROUGH VEGETATION MANAGEMENT

EFFECTS OF FOREST COVER AND CLIMATE CHANGE ON WATER SUPPLY ................................................................. 360
   Ge Sun, Steve McNulty, Jim Vose

WATER RESOURCE RESPONSES IN BEETLE-KILLED CATCHMENTS IN NORTH-CENTRAL COLORADO .................................................................................... 361
   Ryan Jensen, John D Stednick

WATER YIELD AND TIMBER HARVESTING PRACTICES IN COLORADO SUBALPINE FORESTS ...................................................................................... 362
   C A Troendle, John D Stednick

WATER YIELD AND VEGETATION VEGETATION CLEARING ACROSS PRECIPITATION GRADIENTS:
LESSONS LEARNED FROM NEW MEXICO ......................................................................................................................... 363
   Sam Fernald, Hector Garduno, Carlos Ochoa

10.2 – ENHANCING WATER YIELD THROUGH VEGETATION MANAGEMENT II

LONGITUDINAL STUDY OF BMP IMPLEMENTATION IN NEW YORK CITY WATERSHED ................................................................. 364
   Joshua Vanbrakle, Rene Germain, John Munsell

MONTANA’S FORESTRY BMP PROGRAM - 20 YEARS OF CONTINUOUS IMPROVEMENT ...................................................... 365
   Brian Sugden, Gary Frank, Patrick Heffernan, George Mathieu, Gordy Sanders

NORTHERN FOREST WATERSHED SERVICES: INCENTIVES FOR MANAGEMENT ON PRIVATE LANDS ........................................................................ 378
   Todd Gartner

10.7 – EFFECTS OF LANDSCAPE LEVEL MANAGEMENT

HOW ACCURATE ARE YOUR FOREST MEASUREMENTS DERIVED FROM LIDAR? ................................................................. 379
   I-Kuai Hung, John Chapman, Jeffrey Tippen, Daniel Unger, David Kulhavy

PHILMONT VISITING FORESTER PROGRAM OFFERS NATIONAL OUTREACH OPPORTUNITIES ................................................................. 380
   Harry Morrison, Mark Anderson, Doug Cram, Arnie Friedt, Mary Stuever

RECENT EVALUATIONS OF GPS TECHNOLOGY IN THE SOUTHEASTERN UNITED STATES ................................................................. 381
   Pete Bettinger

11.1 – NATIONAL FOREST APPLICATIONS

A CERTIFIER’S PERSPECTIVE ON CHANGES TO THE FSC U.S. NATIONAL FOREST MANAGEMENT STANDARD ................................................................. 382
   Dave Wager

SCIENCE APPLICATION IN SUPPORT OF FIRE MANAGEMENT DECISION MAKING ................................................................. 383
   Thomas Zimmerman

THE SOUTHERN FIRE EXCHANGE - PUTTING FIRE SCIENCE ON THE GROUND ................................................................. 384
   Alan Long, Toddi Steelman, Leda Kotzizar, Annie Hermansen
## 11.2 - MODELS

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modeling Terrestrial Carbon Sequestration and Potential Enhancement Options</td>
<td>385</td>
</tr>
<tr>
<td>Sensitivity of Forest Planning to the Parameters of Simulated Annealing</td>
<td>386</td>
</tr>
<tr>
<td>Sustainable Capacity in Value, Biomass &amp; Carbon - What Models Provide</td>
<td>387</td>
</tr>
<tr>
<td>Benktesh Sharma, Jingxin Wang</td>
<td></td>
</tr>
<tr>
<td>Bogdan Strimbu, Mihaela Puun</td>
<td></td>
</tr>
<tr>
<td>James Arney</td>
<td></td>
</tr>
</tbody>
</table>

## 11.3 – MANAGEMENT TOOLS

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ForestSteward.com: A Web-Based Tool for Applying Recent Research to Management</td>
<td>414</td>
</tr>
<tr>
<td>Inventory-Based Sensitivity Analysis of Ponderosa Pine Growth As Modeled in FVS</td>
<td>415</td>
</tr>
<tr>
<td>Modelling Tree Growth Under Varying Silvicultural Procedures: A Biological Perspective</td>
<td>416</td>
</tr>
<tr>
<td>Robert York</td>
<td></td>
</tr>
<tr>
<td>Eric Turnbloom, Jonathan Bakker, Maria Petrova</td>
<td></td>
</tr>
<tr>
<td>Leah Rathbun</td>
<td></td>
</tr>
</tbody>
</table>

## 11.4 – LAND PRACTICE LEGACIES

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementing an Agency-Wide Response to Climate Change: The Forest Service’s Climate Change Roadmap and Scorecard</td>
<td>417</td>
</tr>
<tr>
<td>Silviculture &amp; High Grading: The New York Example</td>
<td>418</td>
</tr>
<tr>
<td>Using Quantitative Forest Structure Targets: The Good, Bad, and Ugly</td>
<td>419</td>
</tr>
<tr>
<td>David Cleaves</td>
<td></td>
</tr>
<tr>
<td>Michael Greason, Carl Wiedemann, James Coufal</td>
<td></td>
</tr>
<tr>
<td>Kevin Gehringer</td>
<td></td>
</tr>
</tbody>
</table>

## 11.5 – ASSESSING WILDLIFE HABITAT

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluating Wildlife Habitat with VDDT in Central Arizona</td>
<td>451</td>
</tr>
<tr>
<td>Phosphorus Nutrition and Biogeochemistry in Acacia Koa Forests of Hawaii</td>
<td>452</td>
</tr>
<tr>
<td>Use of FIA and FHM Data to Assess Wildlife Habitat</td>
<td>453</td>
</tr>
<tr>
<td>Jack Triepke, Reuben Weisz, Anita Morzillo</td>
<td></td>
</tr>
<tr>
<td>Travis Idol, Dean Meason, James Frady, Paul Scowcroft</td>
<td></td>
</tr>
<tr>
<td>Alison C. Dibble, Ken Lausten</td>
<td></td>
</tr>
</tbody>
</table>

## 11.6 – FOREST ASSESSMENT

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Predictive Regional-Scale Model for Southwestern Ponderosa Pine Regeneration Densities</td>
<td>454</td>
</tr>
<tr>
<td>Effects of Stand and Inter-Specific Stocking on Standing Tree Carbon Stocks in Forests of the Eastern United States</td>
<td>455</td>
</tr>
<tr>
<td>Potentially Available LWD Metrics for Assessing Riparian Forest Function</td>
<td>456</td>
</tr>
<tr>
<td>Joshua Puhlick, Margaret Moore, Daniel Laughlin</td>
<td></td>
</tr>
<tr>
<td>Anthony D’Amato, Christopher Woodall</td>
<td></td>
</tr>
<tr>
<td>Kevin Gehringer</td>
<td></td>
</tr>
</tbody>
</table>

## 11.7 – SAMPLING WORKSHOP

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop on Sampling and Sample Size Estimation</td>
<td>486</td>
</tr>
<tr>
<td>Steve Fairweather</td>
<td></td>
</tr>
</tbody>
</table>

## 13.1 – DEVELOPING A PROFESSIONAL NETWORK

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecting Education with Your Professional Life</td>
<td>487</td>
</tr>
<tr>
<td>It’s a Small World: How SAF Networking and Mentoring Create Future Employment Opportunities</td>
<td>488</td>
</tr>
<tr>
<td>Managing Your Student Chapter</td>
<td>489</td>
</tr>
<tr>
<td>Ken Lausten, Dave Walters, Dylan Jenkins</td>
<td></td>
</tr>
<tr>
<td>Jan Davis</td>
<td></td>
</tr>
<tr>
<td>Dick Hopkins</td>
<td></td>
</tr>
</tbody>
</table>
13.2 – EXPERIENCE AND JOB PERFORMANCE

GETTING PROFESSIONAL WORK EXPERIENCE WHILE YOU ARE WORKING ON YOUR EDUCATION ...........................................490
Ericka Popovich

HOW AND WHY PROFESSIONAL ETHICS MAKE OR BREAK YOU .........................................................................................491
Ann Forest Burns

WHAT EMPLOYERS WANT FROM YOU ........................................................................................................................................492
Pat Stephens Williams

13.4 – EXPERIENCING SUCCESS

OPPORTUNITIES FOR LEADERSHIP EXPERIENCE IN SAF: UNDERSTANDING THE SYSTEM ......................................................493
Bill Rockwell

SUCCEEDING IN CAREER AND LIFE ........................................................................................................................................494
Shibu Jose, Julie Lydick, Ramiro Rojas, Sharon Kyhl

14.1 – PUBLIC LANDS POLICIES

CHALLENGES IN CONNECTING CUMULATIVE IMPACTS ANALYSIS TO EFFECTIVE WILDLIFE CONSERVATION PLANNING .....................................................................................................................495
Courtney Schultz

FEDERAL POLICY CONSTRAINTS AND STAND CONDITIONS IN DRY NORTHERN FORESTS ................................................496
Stephen Fitzgerald, Paul Adams, Gregory Filip

UPDATE ON NATIONAL FOREST POLICY ISSUES ........................................................................................................................497
Erica Rhoad

14.2 – PRIVATE AND STATE LANDS POLICIES

POLICY INSTRUMENT DESIGN FOR EARLY SUCCESSIONAL FOREST HABITAT CONSERVATION ........................................498
Shorna Broussard-Alfred, Richard Stedman, Ashley Dayer, Judy Enck

STATE FOREST ASSESSMENTS AND STRATEGIES .......................................................................................................................499
Theodore Beauvais, Lisa Allen

WHAT AFFECTS FAMILY FOREST OWNER PARTICIPATION IN FOREST CONSERVATION PROGRAMS? ..........................................................500
Zhao Ma, Brett Butler, David Kittredge, Paul Catanzaro

14.3 – BIOMASS ENERGY POLICIES

BIOMASS ENERGY AND GHG EMISSION POLICY- PERSPECTIVES FROM CRITICS AND SCIENTISTS .............................................501
Marcia Patton-Mallory

IT TAKES TWO: FORESTRY AND ENERGY POLICY IN THE AMERICAN WEST ..............................................................................502
Kurt Mackes, Mike Eckhoff

POLICY RECOMMENDATIONS FOR INCREASING FOREST BIOMASS UTILIZATION RESEARCH IN COLORADO .........................................................503
Mike Eckhoff, Kurt Mackes

15.3 – STREET TREE STRATEGIES

A COMPARISON OF STREET TREE PLANTING DIVERSITY IN EIGHT OHIO COMMUNITIES .........................................................504
T. Davis Sydnor, Sakthi K. Subburayalu

A LOOK AT STREET TREE SURVIVAL ON COMMUNITY STREETS IN 97 SITES IN FIVE METROPOLITAN AREAS .................................................................505
T. Davis Sydnor, Sakthi K. Subburayalu

WEIGHTED SIMPSON INDEX: A USEFUL GUIDE WHEN PLANNING STREET TREE REPLACEMENTS ........................................506
Sakthi K. Subburayalu, T. Davis Sydnor

15.4 – URBAN FORESTS: MULTIPLE USES

FORESTED RIPARIAN BUFFERS FOR STORMWATER MANAGEMENT: BIOPHYSICAL AND SOCIAL ASPECTS ........................................507
Jim Thompson, Cassie Herringshaw, Timothy Stewart

STUDY ON HUMAN COMFORT IN THE URBAN FOREST OF GADJAH MADA UNIVERSITY, YOGYAKARTA, INDONESIA ........................................................................................................................508
Kaharuddin S. Hut, Siti Nurul Rofiqo Irwan
16.5 – 4 FORESTS INITIATIVE

THE 4 FOREST RESTORATION INITIATIVE: PERSPECTIVES ON COLLABORATIVELY-PLANNED, LANDSCAPE-SCALE RESTORATION .................................................................................................................. 509
Courtney Schultz, Ethan Aumack

16.61 – FOREST HISTORY

HISTORY OF CONSOLIDATIONS OF NATIONAL FORESTS AND RANGER DISTRICTS ............................................................. 510
Tom Thompson

16.62 – NEPA UPDATES

FOREST SERVICE NEPA RESEARCH: UPDATES AND APPLICATIONS FOR THE FIELD .......................................................... 511
Michael Mortimer, Robert Malmshheimer

17.5 – ADDING VALUE WORKSHOP

PIÑON TREE MORTALITY AND THE ROLE OF ASSOCIATED FUNGAL COMMUNITIES ................................................................ 512
Joanna Redfern, Miriam Huttchinson, Ashley Talbot, Paulette Ford, Andrea Porras-Alfaro, Donald Natvig

Author Index