



INDEX

Arboriculture & Urban Forestry Volume 42, 2016

- Acer spp. (maple)**
 effects of container type and root pruning, 31, 73
 forecasting effects of heat and pests, 181
 growth response to pruning, 133
 transplant success, 170
- Acimovic, Srdan G. *see* Wyka, Stephen A.
- acoustic testing**
 of wood elasticity, 227
- Allison, R. Bruce. *see* Koeser, Andrew K.
- Allred, Shorna. *see* Moskell, Christine
- anchorage**
 effect of liner container size, root ball slicing and season of root pruning, 234
 effect of root pruning and orientation, 146
 effects of container type and root pruning, 73
 impact of stabilization system and production method, 246
- Arbor Day Foundation**
 national assessment of Tree City USA, 120
- arboricultural practices, 377**
- Arbutus spp.**
 carbon uptake and pollution mitigation by, 329
- Arnold, Michael A. *see* Gracia, Lauren M.
- ash (*Fraxinus* spp.)**
 growth response to pruning, 133
 xylem discoloration from trunk injections for EAB, 389
- ash borers, emerald**
 xylem discoloration from trunk injections for, 389
- Autio, Alisha M. (and M.E. Day),
 Cytokinin phytohormonal effects on crown structure, 1
- baldecypress (*Taxodium* spp.)**
 transplant success, 170
- bark beetles**
 pathogenicity to pine of fungi carried by beetles, 84
- Barton, Susan S. *see* Townsend, Joseph B.
- Bary, Andy (and R.L. Hummel and C. Cogger), Urban highway roadside soils and shrub plantings enhanced by surface-applied and incorporated organic amendments, 418
- Bassuk, Nina. *see* Moskell, Christine
- Beckley, Tom. *see* Ordóñez, Camilo
- Berland, Adam (and D.L. Herrmann and M.E. Hopton), National assessment of Tree City USA participation according to geography and socioeconomic characteristics, 120
- Bernick, Shawn. *see* Haugen, Chris
- Bick, Emily. *see* Haugen, Chris
- bifurcation**
 remodeling in hazel, 355
- biochar**
 amendment for roadside soils and shrub plantings, 418
 and transplant survival, 102
- bittersweet (*Celastrus* spp.)**
 killing by cutting alone, 253
- book reviews**
Features from the Past for the Future. Branching Out: An Integrated Pest Management Newsletter for Trees and Shrubs, 211
- borers, emerald ash**
 xylem discoloration from trunk injections for, 389
- bracing**
 remodeling of bifurcations in hazel, 355
- Broschat, Timothy K. *see* Elliott, Monica L.
- building lots**
 wooded, 285
- Burchi, Gianluca. *see* Mori, Jacopo
- Buteau, Christian. *see* Follett, Matt
- Butry, David T. *see* Donovan, Geoffrey H.
- Canada**
 survey of public value of urban forests, 46
- carbon**
 uptake by evergreen shrubs, 329
- Carpenter, Aaron. *see* Dahle, Gregory
- Carver, Sean T. *see* Gracia, Lauren M.
- Celastrus* spp. (bittersweet)**
 killing by cutting alone, 253
- chaste tree (*Vitex* spp.)**
 transplant success, 170
- Cogger, Craig. *see* Bary, Andy
- community engagement**
 street tree stewardship, 301
- compost**
 amendment for roadside soils and shrub plantings, 418
 effect on *Ulmus* physiology, 192
- construction**
 on wooded lots, 285
- container stock**
 effect of container size on transplant establishment, 170
 effect of container type on growth and anchorage, 73
 effect of container type on root architecture, 31
 effect of liner container size on *Quercus*, 234
- coralberry (*Symphoricarpos* spp.)**
 organic amendments for roadside plantings, 418
- Corylus* spp. (hazel)**
 remodeling of bifurcations, 355
- crowns**
 effect of cytokinin on structure, 1
- Cryptomeria* spp. (Japanese cedar)**
 nondestructive evaluation of decay damage, 201
- cytokinin**
 effect on crown structure, 1
- Dahle, Gregory (and A. Carpenter and D. DeVallance), Non-destructive measurement of the modulus of elasticity of wood using acoustical stress waves, 227
- Dale, Adam G. (and E. Youngsteadt and S.D. Frank), Forecasting the effects of heat and pests on urban trees: Impervious surface thresholds and the 'pace-to-plant' technique, 181
- Day, Michael E. *see* Autio, Alisha M.
- decay**
 internal trunk in *Quercus*, 217
 nondestructive evaluation of damage, 201
- Degl'Innocenti, Ciro. *see* Fini, Alessio
- Delphi technique, 377**
- Denny, Geoffrey C. *see* Gracia, Lauren M.
- DeVallance, David. *see* Dahle, Gregory
- Diduck, Jaclyn. *see* Ordóñez, Camilo

- Doccola, Joseph J. *see* Wyka, Stephen A.
- Donovan, Geoffrey H. (and D.T. Butry and M.Y. Mao), Statistical analysis of vegetation and stormwater runoff in an urban watershed during summer and winter storms in Portland, Oregon, U.S., 318
- drilling**
remodeling of bifurcations in hazel, 355
- Duinker, Peter N. *see* Ordóñez, Camilo
- economics**
cost of not maintaining trees, 377
LITA for valuation, 21
- Ehlen, Grant. *see* Haugen, Chris
- Elaeagnus spp. (silverberry)**
carbon uptake and pollution mitigation by, 329
- elasticity**
non-destructive measurement, 227
- electrical resistance tomography**
imaging palm trees, 111
- Elliott, Monica L. (and T.K. Broschat and L. Göcke), Preliminary evaluation of electrical resistance tomography for imaging palm trunks, 111
- elm (*Ulmus* spp.)**
effect of compost mulch, 192
- emerald ash borer**
xylem discoloration from trunk injections for, 389
- Ennos, A. Roland. *see* Slater, Duncan
- Ferrini, Francesco. *see* Fini, Alessio; Mori, Jacopo
- fertilizer and fertilizing**
organic NPK and transplant survival, 102
- Fini, Alessio (and C. Degl'Innocenti and F. Ferrini), Effect of mulching with compost on growth and physiology of *Ulmus* 'FL634' planted in urban park, 192
see also Mori, Jacopo
- Florida**
internal trunk decay in *Quercus*, 217
- Follett, Matt (and C.A. Nock, C. Buteau, and C. Messier), Testing a new approach to quantify growth responses to pruning among three temperate tree species, 133
- forests and forestry**
municipal, 267
remote sensing for monitoring, 400
- Frank, Steven D. *see* Dale, Adam G.
- Fraxinus spp. (ash)**
growth response to pruning, 133
xylem discoloration from trunk injections for EAB, 389
- fungi**
pathogenicity to pine of fungi carried by bark beetles, 84
- fungicides**
protection against fungi carried by bark beetles, 84
- Ganoderma spp. (palm)**
imaging with electrical resistance tomography, 111
- Garcia, Lauren M. (and M.A. Arnold, G.C. Denny, S.T. Carver, and A.R. King), Differential environments influence initial transplant establishment among tree species produced in five container sizes, 170
- geography**
Tree City USA characteristics, 120
- Gilman, Edward F. (and M. Paz and C. Harchick), Effect of container type and root pruning on growth and anchorage after planting *Acer rubrum* L. into landscape soil, 73
- Gilman, Edward F. (and M. Paz and C. Harchick), Effect of eight container types and root pruning during nursery production on root architecture of *Acer rubrum*, 31
- Gilman, Edward F. (and M. Paz and C. Harchick), Effect of linear container size, root ball slicing, and season of root pruning in a field nursery on *Quercus virginiana* Mill. growth and anchorage after transplanting, 234
- Gilman, Edward F. (and M. Paz and C. Harchick), Impact of nursery root pruning and tree orientation on growth and anchorage, 160
- Gilman, Edward F. (C. Harchick and M. Paz), Impact of landscape tree stabilization system and nursery production method on anchorage and growth, 246
- Göcke, Lothar. *see* Elliott, Monica L.
- growth modeling, 133**
- growth regulators**
cytokinin, 1
paclobutrazol, 95
- growth response**
effect of liner container size, root ball slicing and season of root pruning, 234
impact of stabilization system and production method, 246
to pruning in temperate species, 133
to root pruning and orientation, 146
- Harchick, Chris. *see* Gilman, Edward F.
- Harper, Richard W. (and P.A. Weston), Potential of alternative *Tsuga* spp. as landscape replacements for *T. canadensis*: Longer-term evaluation and propagation of *T. chinensis*, 346
- Hasing, Gitta. *see* Koeser, Andrew K.
- Hauer, Richard J. *see* Koeser, Andrew K.; O'Herrin, Keith
- Haugen, Chris (and K. Tucker, A. Smalling, E. Bick, S. Hoover, G. Ehlen, T. Watson, and S. Bernick), The efficacy of paclobutrazol soil application as it relates to the timing of utility right-of-way pruning, 95
- hazard trees**
killing bittersweet by cutting alone, 253
- hazel (*Corylus* spp.)**
remodeling of bifurcations, 355
- hemlock (*Tsuga* spp.)**
potential landscape tree, 346
- hemlock woolly adelgid**
alternative *Tsuga* species for landscapes, 346
- Herrmann, Dustin L. *see* Berland, Adam
- highways**
organic amendments for soil and plantings, 418
- Hoover, Steve. *see* Haugen, Chris
- Hopton, Matthew E. *see* Berland, Adam
- human stress and trees, 146**
- Hummel, Rita L. *see* Bary, Andy
- Ilvento, Thomas W. *see* Townsend, Joseph B.
- insecticides**
xylem discoloration from trunk injections for EAB, 389
- integrated pest management**
forecasting effects of pests on urban trees, 181
- integrated vegetation management**
paclobutrazol and timing of utility corridor pruning, 95
- Japanese cedar (*Cryptomeria* spp.)**
nondestructive evaluation of decay damage, 201
- King, Andrew R. *see* Gracia, Lauren M.
- Klepzig, Kier D. *see* Wyka, Stephen A.
- Koeser, Andrew K. (and D.C. McLean, G. Hasing, and R.B. Allison), Frequency, severity, and detectability of internal trunk decay of street tree *Quercus* spp., 217
- Koeser, Andrew K. (and J.M. Vogt, R.J. Hauer, R.J. Northrop, and W. Peterson), The cost of not maintaining trees: Findings and recommendations from an international symposium and summit, 377
- landscape trees**
potential for hemlock, 346
- Laurus spp.**
carbon uptake and pollution mitigation by, 329
- Lee, Chia-Ju. *see* Lin, Cheng-Jung
- Ligustrum spp.**
carbon uptake and pollution mitigation by, 329

- Lin, Cheng-Jung (and C. Lee and M. Tsai), Inspection and evaluation of decay damage in Japanese cedar trees through nondestructive techniques, 201
- Linear Index of Tree Appraisal (LITA)**
for economic valuation, 21
- litter decomposition**
and microbial communities in urban land, 58
- Louisiana**
paclobutrazol and timing of utility corridor pruning, 95
- MacRae, Pat. *see* Moskell, Christine
- Mahonia spp.**
organic amendments for roadside plantings, 418
- Mao, Megan Y. *see* Donovan, Geoffrey H.
- maple (*Acer spp.*)**
effects of container type and root pruning, 31, 73
forecasting effects of heat and pests, 181
growth response to pruning, 133
transplant success, 170
- McCullough, Deborah G. *see* Tanis, Sara R.
- McLean, Drew C. *see* Koeser, Andrew K.
- McPherson, Douglas W. *see* Wyka, Stephen A.
- Messier, Christian. *see* Follett, Matt
- Miller, Robert W. *see* O'Herrin, Keith
- models**
growth, 133
Linear Index of Tree Appraisal (LITA), 21
- molasses, slow-release**
and transplant survival, 102
- Mori, Jacopo (and A. Fini, G. Burchi, and F. Ferrini), Carbon uptake and air pollution mitigation of different evergreen shrub species, 329
- Moskell, Christine (and N. Bassuk, S. Allred, and P. MacRae), Engaging residents in street tree stewardship: Results of a tree watering outreach, 301
- mulch**
effect on *Ulmus* physiology, 192
for roadside soils and shrub plantings, 418
- Nock, Charles A. *see* Follett, Matt
- Northrop, Robert J. *see* Koeser, Andrew K.
- Nowak, Christopher A. (and C.J. Peck), Large oriental bittersweet vines can be killed by cutting alone: Implications for utility arboriculture and other hazard tree work, 253
- nursery stock**
impact of production method on anchorage and growth, 246
- oak (*Quercus spp.*)**
effect of liner container size, root ball slicing and season of root pruning, 234
internal trunk decay, 217
non-destructive measurement of wood elasticity, 227
paclobutrazol and timing of utility corridor pruning, 95
- O'Herrin, Keith (and P. Shields), Assessing municipal forestry activity: A survey of home-rule municipalities in Texas, U.S., 267
- O'Herrin, Keith (and R.J. Hauer, W.J. Vander Weit, and R.W. Miller), Homebuilder practices and perceptions of construction on the wooded lot: A quarter century later follow-up assessment, 285
- optimization of tree care, 377**
- Ordóñez, Camilo (and P.N. Duinker, A.J. Sinclair, T. Beckley, and J. Diduck), Determining public values of urban forests using a sidewalk interception survey in Fredericton, Halifax, and Winnipeg, Canada, 46
- Oregon**
vegetation and stormwater runoff during storms, 318
- orientation**
effect on growth and anchorage, 146
- Östberg, Johan (and J. Sjögren), The Linear Index of Tree Appraisal (LITA) model for economic valuation of large urban trees in Sweden, 21
- paclobutrazol**
and timing of utility corridor pruning, 95
- palms**
imaging with electrical resistance tomography, 111
- Paz, Maria. *see* Gilman, Edward F.
- pear (*Pyrus spp.*)**
influence of biochar, molasses, and organic NPK on transplant survival, 102
- Peck, Caryl J. *see* Nowak, Christopher A.
- Percival, Glynn. *see* Schaffert, Emma
- Peterson, Ward. *see* Koeser, Andrew K.
- Photina spp.**
carbon uptake and pollution mitigation by, 329
- phytohormonal effects, 1**
- pine (*Pinus spp.*)**
pathogenicity of fungi carried by bark beetles, 84
- Pinus spp. (pine)**
pathogenicity of fungi carried by bark beetles, 84
- pollution mitigation**
by evergreen shrubs, 329
- pruning**
growth response in temperate species, 133
- public perceptions**
building on wooded lots, 285
- Pyrus spp. (pear)**
influence of biochar, molasses, and organic NPK on transplant survival, 102
- Quercus spp. (oak)**
effect of liner container size, root ball slicing and season of root pruning, 234
internal trunk decay, 217
non-destructive measurement of wood elasticity, 227
paclobutrazol and timing of utility corridor pruning, 95
- remote sensing**
for monitoring urban forests, 398
- research summits, 377**
- Rhus spp. (sumac)**
organic amendments for roadside plantings, 418
- risk assessment**
internal trunk decay in *Quercus*, 217
- roads**
organic amendments for soil and plantings, 416
- root architecture**
effects of container type and root pruning, 31, 73
- root pruning**
effect of season on *Quercus*, 234
effect on growth and anchorage, 146
effect on root architecture, 31
- runoff**
vegetation and stormwater during storms, 318
- satellite imagery**
for monitoring urban forests, 400
- scale (insect)**
forecasting effects of on urban trees, 181
- Schaffert, Emma (and G. Percival), The influence of biochar, slow-release molasses, and an organic N:P:K fertilizer on transplant survival of *Pyrus communis* 'Williams' Bon Chrétien,' 102
- Shafri, Helmi Z.M. *see* Shojanoori, Raziieh
- Shields, Patricia. *see* O'Herrin, Keith
- Shojanoori, Raziieh (and H.Z.M. Shafri), Review on the use of remote sensing for urban forest monitoring, 400
- shrubs**
carbon uptake and pollution mitigation by evergreen, 329
organic amendments for roadside plantings, 418
- silverberry (*Elaeagnus spp.*)**
carbon uptake and pollution mitigation by, 329

- Sinclair, A. John. *see* Ordóñez, Camilo
 Sjögren, Johan. *see* Östberg, Johan
 Slater, Duncan (and A.R. Ennos),
 An assessment of the remodeling
 of bifurcations in hazel (*Corylus*
 avellana L.) in response to bracing,
 drilling, and splitting, 355
 Sloss, Brian L. *see* Turnquist, Keith H.
 Smalling, Alex. *see* Haugen, Chris
 Smith, Sheri L. *see* Wyka, Stephen A.
- socioeconomics**
 Tree City USA characteristics, 120
- soil amendments**
 organic for roadside soils and shrub
 plantings, 418
 and transplant survival, 102
- soil microbiology**
 and litter decomposition in urban
 land, 58
- splitting**
 remodeling of bifurcations in hazel,
 355
- stabilization systems**
 effect on remodeling of bifurcations
 in hazel, 355
 impact of growth and anchorage, 246
- stormwater**
 runoff during storms, 318
- street trees**
 stewardship by residents, 301
- stress, human, 146**
 Strom, Brian L. *see* Wyka, Stephen A.
- sumac (*Rhus* spp.)**
 organic amendments for roadside
 plantings, 418
- surveys**
 public value of urban forests, 46
- Sweden**
 LITA for economic valuation, 21
- Syagrus* spp. (palm)**
 imaging with electrical resistance
 tomography, 111
- Symphoricarpos* spp. (coralberry)**
 organic amendments for roadside
 plantings, 418
- Tanis, Sara R. (and D.G. McCullough),
 Evaluation of xylem discoloration
 in ash trees associated with
 macroinjections of systemic
 insecticide, 389
- Taxodium* spp. (baldcypress)**
 transplant success, 170
- temperature**
 forecasting effects of heat and pests
 on urban trees, 181
- Texas**
 municipal forestry, 267
- Townsend, Joseph B. (and T.W. Ilvento
 and S.S. Barton), Exploring the
 relationship between trees and human
 stress in the urban environment, 146
- transplant survival**
 effect of environment and container
 size, 170
 influence of biochar, molasses, and
 organic NPK, 102
- tree care, efficiency of, 377**
- Tree City USA**
 geography and socioeconomic
 characteristics, 120
 municipal forestry, 267
- tree growth**
 effects of container type and root
 pruning, 73
- tree inspection**
 nondestructive evaluation of decay
 damage, 201
- tree valuation**
 Linear Index of Tree Appraisal
 (LITA), 21
 Tsai, Ming-Jer. *see* Lin, Cheng-Jung
- Tsuga* spp. (hemlock)**
 potential landscape tree, 346
- Tucker, Kevin. *see* Haugen, Chris
 Turnquist, Keith H. (and L.P. Werner
 and B.L. Sloss), An examination of
 soil microbial communities and litter
 decomposition in five urban land
 uses in metropolitan Milwaukee, WI,
 U.S., 58
- Ulmus* spp. (elm)**
 effect of compost mulch, 192
- urban trees**
 and human stress, 146
 LITA for economic valuation, 21
 national assessment of Tree City
 USA, 120
 survey of public value of urban
 forests, 46
- urbanization**
 effect on soil microbes and litter
 decomposition, 58
- utility arboriculture**
 killing bittersweet by cutting alone,
 253
- Vander Weit, William J. *see* O'Herrin,
 Keith
- vegetation management**
 killing bittersweet by cutting alone, 253
- Viburnum* spp.**
 carbon uptake and pollution
 mitigation by, 329
- Vitex* spp. (chaste tree)**
 transplant success, 170
- Vogt, Jessica M. *see* Kooser, Andrew K.
- watering**
 street tree stewardship, 301
- Watson, Todd. *see* Haugen, Chris
 Werner, Les P. *see* Turnquist, Keith H.
 Weston, Paul A. *see* Harper, Richard W.
- Wisconsin**
 soil microbial communities and litter
 decomposition, 58
- wood decay**
 imaging with electrical resistance
 tomography, 111
- wood elasticity**
 non-destructive measurement, 227
- wooded lots**
 homebuilder practices and
 perceptions, 285
- Wyka, Stephen A. (and J.J. Doccia, B.L.
 Strom, S.L. Smith, D.W. McPherson,
 S.G. Acimovic, and K.D. Klepzig),
 Effects of *Grossmannia clavigera*
 and *Leptographium longiclavatum*
 on western white pine seedlings and
 the fungicidal activity of Alamo®,
 Arbotech®, and Tree-äge, 84
- xylem**
 discoloration from trunk injections
 for EAB, 389
 Youngsteadt, Elsa. *see* Dale, Adam G.